

THE IMPACT OF SOFT SKILLS TRAINING AND DEVELOPMENT USING  
TIME SPACE LEARNING ON WORK PERFORMANCE

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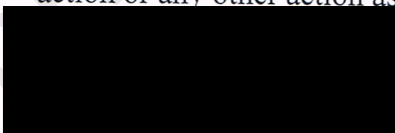
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## ABSTRACT

The purpose of this study is two-fold with regard to testing of soft skills acquisition among learners or employees toward their work performance enhancement. First, is to examine the soft skills competencies acquired from the soft skills training and their influence on employee work performance. Second, by examining the influence of both training methodology - '*time space learning*' and trainer's effectiveness on soft skills acquisition after trainees attended the training program which will directly affect their work performance. The study used a survey research questionnaire to study the competencies of various Malaysian-based organizations' employees at manager, executive and supervisory level who had undergone the training program over a few months using '*time space learning*' – training methodology; that is program not run consecutively but run with a break or '*time space*' in between each session, in order to investigate the '*spacing effect*' of the learning. The findings revealed that soft skills acquisition significantly influence employee work performance by 79%; training methodology positively impact on soft skills acquisition by 51%; and trainer's effectiveness positively influences soft skills acquisition by 24%; thus, confirmed hypothesis 1, 2, and 4. As for the indirect effect, the findings showed that soft skills have a mediating effect between training methodology and work performance, but no mediating effect between trainers' effectiveness and work performance, in which hypothesis 3 was accepted but hypothesis 5 rejected. The findings contribute to the literature by filling the gap in terms of studies examining the training methodology in soft skills acquisition; and make a significant contribution to learning theory, particularly, '*time space learning*' training methodology. The findings highlighted the urgency of identifying the most effective training methodology to be incorporated for soft skills training of employees in an organization, in order to get the best return on investment.

## ABSTRAK

Tujuan penyelidikan ini merangkumi dua bahagian dalam mengkaji pemerolehan kemahiran insaniah terhadap peningkatan prestasi kerja. Pertama, mengkaji kompetensi kemahiran insaniah yang diperolehi oleh pelatih setelah menjalani latihan serta pengaruhnya terhadap prestasi kerja. Kedua, mengkaji pengaruh kaedah latihan – ‘*pembelajaran masa ruang*’ serta keberkesanan tenaga pengajar ke atas pemerolehan kemahiran insaniah selepas pelatih menghadiri kursus latihan tersebut. Kajian ini menggunakan borang soal selidik kajian penyelidikan untuk mengkaji kompetensi pekerja (pengurus dan eksekutif) yang telah menjalani kursus latihan selama beberapa bulan dengan menggunakan kaedah latihan – ‘*pembelajaran masa ruang*’ dalam usaha untuk mengkaji kesan kaedah latihan terhadap pelatih yang bekerja dipelbagai organisasi di Malaysia. Penemuan kajian mendedahkan bahawa pemerolehan kemahiran insaniah dengan ketaranya mempengaruhi prestasi kerja pekerja sebanyak 79%; kaedah latihan pula memberi impak yang positif terhadap pemerolehan kemahiran insaniah sebanyak 51%; dan keberkesanan tenaga pengajar positif mempengaruhi pemerolehan kemahiran insaniah sebanyak 24%; dengan ini mengesahkan hipotesis-1, 2, and 4. Manakala kesan tidak langsung, penemuan menunjukkan bahawa pemerolehan kemahiran insaniah ada mempunyai kesan ‘*mediating*’ di antara kaedah latihan dan prestasi kerja, tetapi sebaliknya tiada kesan ‘*mediating*’ di antara keberkesanan tenaga pengajar dan prestasi kerja, Oleh itu hipotesis 3 diterima dan hipotesis 5 ditolak. Kajian ini menyumbang kepada literatur dengan mengisi jurang penyelidikan di antara kaedah latihan ‘*pembelajaran masa ruang*’ dengan kemahiran insaniah, serta memberi sumbangan kepada teori pembelajaran. Penemuan kajian menekankan betapa pentingnya kaedah latihan yang dilaksanakan dalam mengendali kursus latihan kemahiran insaniah dalam setiap organisasi untuk mendapatkan pulangan pelaburan yang terbaik.

## ACKNOWLEDGMENT / DEDICATION

Firstly, thank you to Allah SWT for giving me the strength to complete this Ph.D. I dedicate this thesis specially to my beloved wife *Aidah* - whose love, understanding and support strengthened my perseverance - and to my beloved mother and parent-in-law; without their prayers, this accomplishment would not have been possible. I also dedicate this to my beloved family members - *Aiman, Diyana, Dinie, Zaza and Shah*. I hope my achievement will be an inspiration to them and their children - *Ayra, Aleesya and Aleia* - in their journey in life. Not forgetting to my brother and sister in-law - *A. Ghani* and *Noraini* - who never stop praying for our success. To my brothers and sisters in my hometown in Kedah, for their silent prayers for me, thank you so much. I would like to acknowledge and deeply thank my supervisor, *Dr. Ali Boerhannoeddin* for his continuous guidance, support, encouragement and patience all these years. My deepest thanks also to *Associate Professor Datin Dr. Sabitha* for her guidance, and to all my lecturers and/or professors at University of Malaya who had taught me during my postgraduate studies. I also want to extend my deepest appreciation to my dear friend, *Dr. Kazeem*, who has been educating me tirelessly on the statistical aspects and some other areas throughout this journey. I thank all the participants/trainees who had undergone the soft skills training program using the training methodology that I am studying in my research area, and for taking time to participate in this survey. Your input is greatly appreciated. In addition, I would like to thank all my Ph.D. friends in the weekend discussion group led by Dr. Ali himself, for your willingness to share the knowledge. Lastly, many thanks to everyone who I did not mention here and who had supported me and have been praying for me during my studies.

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## CHAPTER 1: INTRODUCTION

### 1.1 BACKGROUND OF THE STUDY

If we pick any business industry today, chances are that it is very much different in the previous decade than what it is today. This is because the business industry has changed drastically. Professor Kotter at Harvard Business School mentioned that no organization today can escape change and hence, business and industry leaders must alter how their businesses compete (Hesselbein & Cohen, 1999). Change is crucial for organizations in a growing and highly competitive business environment, and necessary actions are needed to motivate employees to avoid resistance to change (Syed Talib Hussain et al., 2016).

In implementing any organizational change, Tan (2005) emphasized that the fate of any organization relies on its work performance culture; whereby leaders must be able to influence their people, to open their minds, touch their hearts and energize their spirit to take the necessary actions. Thus, to be successful, organizations need to have the 'right' or 'strong' work performance culture in place (Hesselbein & Cohen, 1999).

Creating a high work performance culture in an organization is difficult but not impossible. According to Heathfield (2008) it is harder to alter an existing entity than to establish a new working culture in a new institution because when the organizational working culture is entrenched, workers need to unlearn the old behavior patterns before learning new ones. There is an old saying, "*old habits die hard*", and Heathfield (2008) further added that the two most important elements for creating an organizational work culture change are executive or management support and training.

As for the executive or management support, it is extremely important for top management in an organization to consistently support the initiative and work toward creating a higher work performance culture. They must also show behavioral support and must lead the change by changing their own behaviors; in short, they need to model the way or model the behavior (Kouzes & Posner, 2002). Because changing work culture necessitates behavior change, training is crucial for imparting expectations and teaching new desired behaviors for all employees to enhance the overall organizational work performance, which will then generate improved profitability (Heathfield, 2008).

The question now is what kind of training and development program an organization needs to embark upon in order to change the working culture of the employees (attitude and/or behavior) in the organization that depicts their expected values and practices so as to enhance their work performance.

In business skills training, employees' skill can be generally divided into two main categories: *hard skills* and *soft skills*. To compete in business, people need both these skills. The common saying is that hard skills get one hired but soft skills keep one employable. Maniscalco (2010) refers soft skills to a cluster of *qualities, habits, personality traits, attitudes* and *social graces* which everyone possesses in varying degree, and are needed for everyday life as much as they are needed for work. Similarly, Lorenz (2006) defined soft skills (as cited in Hinds-Smith, S., 2009), as "*a cluster of personal qualities, habits, attitudes and social graces that make someone a good employee and a compatible coworker*". According to Robles (2012), soft skills encompass *character traits, attitudes, and behaviors* rather than technical aptitude or knowledge. And to Gibbons and Lange (2000), the term 'soft skills' is synonymous with *core skills, key competencies and personal skills*.

In contrast, ‘hard skills’ normally refer to technical or administrative procedures (i.e., job related skills) related to an organization’s business (Maniscalco, 2010). These are usually more easily observed, quantified and measured, easier to impart and master because the skills are novel to the learner; hence little unlearning or behavioral modification is entailed. In contrast, soft skills are harder to observe, quantify, measure and to deal with (David C. Yen et al., 2001). For example, communicating with someone, listening to others, dealing with staff and customers, managing employees, and so forth, in which many of these relate a great deal to people. While certain people easily connect with others, which is valuable skill in sales, others do not. In fact, soft skills are really everything else – competencies from self-awareness to one’s attitude, to career management, to handling critics, not taking things personally, taking risks, getting along with people and many more (Alboher, 2008). Soft skills enable people to enhance their own competencies and thus increase their capability to contribute to societal advancement and modernization (Duncan & Dunifon, 2012; Remedios, 2012).

The Ministry of Higher Education Malaysia or MOHE (2006, p. 5), interprets soft skills as “*generic skills that include cognitive elements related to non-academic abilities such as positive values, leadership, teamwork, communication and lifelong learning*”. MOHE (2006) divided soft skills into seven (7) areas: (1) Communication skills, (2) Critical thinking and problem solving skills, (3) Team work, (4) Lifelong learning and information management skills, (5) Entrepreneurship skills, (6) Ethics and professional moral skills, and (7) Leadership skills. Each of the areas further contain “must have” and “good to have” skills as cited by Nikitina and Furuoka (2012).

Nilsson (2010) in his study found that competence, interpersonal skills, and personal characteristics significantly influence the employability of individuals. Rahim, Sail, and



Khadijah (2009) assert that interpersonal skills increase employee knowledge after training. Former Human Resource Minister, Datuk Dr. Fong Chan Onn even said that many graduates in Malaysia cannot find jobs because they lack soft skills such as communication, public relations and interpersonal skill (The STAR, April 2, 2005). Malaysian policy makers also have been implementing soft skills development at post-secondary level (Nikitina & Furuoka, 2012). An empirical examination in Malaysia by Seetha (2014) discovered that the soft skills shortfall is said to have caused high graduate unemployment from the employers' perspective. Hairuzilla Idrus et al. (2012) found that for technically based occupations such as engineering, the engineers too need to complement their technical knowledge with soft skills for better effectiveness.

The majority of employers today expect workers to exhibit excellence in many 'softer' skills including teamwork, leadership and group development (Rothwell, 1998). The findings of a study done in Malaysia on soft skills showed that they provide a vital contribution for organizations in the process of developing quality human resource (Tang, 2012). In the United Kingdom (UK), 97 per cent of UK employers surveyed stated that soft skills are very important to their business success and it was highlighted that soft skills contribute £88bn to the UK economy currently and it is predicted to increase to £109bn in the next five years (Clarke, 2016). Salleh, Sulaiman, and Talib (2010) stated that soft skills will be one of the most effective tools for evaluating employee abilities and performance.

Previous studies indicated that it is vital for an organization to develop employees, by giving training and support on soft skills such as *problem solving*, *communication skills*, and *personal qualities* (Lussier, 2012); *leadership and creative thinking* (Rosenau, 1998); and *interpersonal relationship* (Honey, 1988). Through literature review, it is

without doubt that soft skills have been studied in numerous areas especially on their importance, and the need to have them, and that employees need soft skills training programs to achieve a higher work performance culture in organizations.

In this study, I will be looking at a different aspect of soft skills in which the extant literature did not show any had been studied in Malaysia, that is how effective is the employees' soft skills acquisition (*acquired after attending the soft skills training*) affects their individual work performance; and thus, soft skills will be one of the favored variables of interest.

One of the common problems faced by many organizations is to ensure that the employees or trainees upon attending the soft skills training program would go back and develop the skills set, and change their behavior and/or attitude that depicts the expected values and practices which will then enhance their work performance. Traditional programs and training methodology are somehow lacking in imparting the needed soft skills to learners (Wilhelm, Logan, Smith, & Szul, 2002); since most are using teacher-centered approaches, whereby the teacher (or trainer) dispenses *information* while the students or trainees act as idle containers – just hearing, taking take notes and studying for tests; although now things are changing and they do group assignments, and so forth (Howell, Williams, & Lindsay, 2003). Hence, it is worth investigating which appropriate training methodology should be employed to effectively develop soft skills in the employees or trainees.

Training methodology are the *methods, materials, techniques* and *resources* used for transfer new knowledge, skills and attitudes to participants (Mandakini, 2002). Hard skills training comes in a various guises from *demonstration by the trainer to be*

*watched by the trainees, discussion and debate, lecture presentations, role playing, games, electronic media such as video clips, and so forth (James & Dunkle, 2005).*

One such training methodology is on-the-job training or OJT, whereby the learning happens in the workplace itself (Jacobs, 2003). One key drawback of OJT is that it is often unstructured in nature (De Jong, 1996; Jacobs, 2003; Kainen et al., 1983; Noe, 1999; Wilson et al., 1980) hence leading to insufficient information transfer to the trainees besides involving slower transference also (Van Zolingen et al., 2000). On the other hand, a structured OJT which is the one-to-one process of giving specific task knowledge and skills to perform a particular job (Jacobs, 2003) with pre-determined objectives and plans, resulted in greater efficiency and higher quality work than unstructured OJT (Jacobs, 2003).

Another common training methodology today is online training technology; for effectiveness online training must be interactive to encourage content mastery (Nor Azilah et al., 2016). The study by Nor Azilah et al. (2016) on online training among Malaysian public sectors highlighted that the learning effectiveness relies on how learners understand the implementation, their actual utilization of online training, and their own experience in using such applications.

On the other hand, from literature review, formal classroom training (i.e., off-the-job) methodology has seen a marked rise in the over the past twenty years. In fact, studies show it is the most frequently used training methodology (Noe et al., 2002). The problem with this classroom training (off-the-job) methodology is that the acquired knowledge and skills are not being transferred back to the job and trainees tend to return to their previous behavior patterns or routines (Day, 2001). However, Rogers (1996)

asserted that the problem of inability to transfer training by the trainees might not really be due to the training approach in itself, but also the learning style embedded in the training methodology. One such effective learning style that should be considered is experiential learning (or learning by doing); that is the process of creating new knowledge by transforming experience (Kolb, 1984).

To enable experiential learning (or learning by doing), this is where I want to explore the usage of '*time space learning*' – training methodology by giving '*time space*' or '*break*' to the trainees or learners in between the training sessions, instead of conducting the training in straight consecutive days to the finish. Hence, active learner participation and opportunity to experiment (apply and practice) what adult learners had learned in the classroom will improve their learning efficacy and the general classroom experience (Brookfield, 1986; Cross, 1981; Jarvis, 1995; Knowles et al., 2014; Rogers, 2002).

According to Kolb's four-stage model of experiential learning, learners engage in "*observation and reflections*" (stage-2) based on "*concrete experiences*" (stage-1) in order to synthesize them into "*abstract concepts*" (stage-3); hence they learn from the experience, which then forms the basis for "*active experimentation*" (stage-4) which in turns creating new experiences (Kolb, Boyatzis, & Mainemelis, 2001). Adult learners need time to experiment what they had learned in the classroom; going through the training program in straight consecutive days in massed learning (Sutton et al., 2002) may not help them to experience Kolb's 4-stage experiential learning process. Thus, we need to give adults a break (or *time space*) in between the learning process for them to apply and experience Kolb's "*active experimentation*" (stage-4) for themselves. The break (or *time space*) during the learning (i.e. '*time space learning*' - training methodology) is where the learning is spread over an extended time and not delivered

all at one time (i.e., straight consecutive days training). This is needed for adults to change and adopt the new experiences as a new way of doing or behaving. Trials spread across time (i.e., '*time space learning*') are better for imprinting long term memories than those given with very short intervals (i.e., massed learning or training that runs consecutively) in everyone that has been studied (Sutton et al., 2002). Farah et al. (2009) also supported this finding by stating that memories formed are affected not only to the total amount of training given but also to the pattern of trials in the training.

Various training methodologies will yield different results and impact on learners or trainees. Although '*time space learning*' has been in existence for some time and in fact, Dale Carnegie first started using this '*time space learning*' training methodology when he started teaching in 1912, in New York (Carnegie, 1981), current literature about spacing out the learning (i.e., '*time space learning*') however, is built more on education and architectural embodiments of educational philosophies (Monahan, 2002). Its use is very minimal in employee business skills training; its usage is also very minimal compared to traditional classroom training (off-the-job) that runs consecutively. Specifically, the '*time space effect*' of this approach on transfer of the acquired soft skills during training and how it had helped in the work of the trainees, has not been critically studied and articulated in literature. Therefore, '*time space learning*' methodology will be favored as another variable of interest in this study.

In addition to the '*time space learning*' - training methodology, which will determine the degree of soft skills acquisition by the trainees; we also cannot just ignore the trainer's effectiveness in imparting the soft skills knowledge, which in turn affects the trainees' work performance. The trainer must be sensitive and responsive to learner needs besides being genuinely interested and well versed in the subject matter.

According to Leduchowicz and Bennett (1983), trainer competencies consist of two (2) types: (a) *competencies in dealing with people*, and (b) *other training practitioner competencies*. Leduchowicz and Bennett (1983) added that effective trainers seek chances to acquire novel skills and hence continuously improve themselves. Important characteristics described as being desirable for trainer effectiveness include: *patience, humor, confidence, neat appearance, toleration of ambiguity, credibility, and trainer expressiveness - one who shows appropriate vocal intonations* (Abrami, et al., 1980; Towler & Dipboye, 2001).

So far, most studies in the literature had been mainly concerned with training effectiveness and training evaluations, rather than trainer effectiveness; and if it concerns the trainer, then it is more about the trainer role and the criteria proposed for judging trainer effectiveness. However, in this present study, I would like to find out whether the trainer's effectiveness (*the person delivering the soft skills training program*) has any influence on the trainees' or learners' soft skills acquisition or not. Thus, trainer effectiveness will be another variable to be studied and the emphasis will be on the first two (2) levels of Kirkpatrick's four (4) levels of evaluation, namely level-1 "*reaction*" or degree of satisfaction in trainees with the trainer; and level-2 "*learning*" or to what extent trainees master the knowledge and skills during the training.

In this present study, as mentioned earlier, apart from studying the effect of the trainer's effectiveness and the use of '*time space learning*' – training methodology in delivering the soft skills program to the trainees or employees attending the program it is also important to find out the effect of soft skills acquired by the trainees toward their work performance in the real workplace environment.

Work performance culture is an important aspect of overall organizational success. When people talk of the '*corporate culture*', they usually mean values and practices that are shared across all groups in an organization (Kotter & Heskett, 1992); these are simply the collective outcome of individual behavior (Hesselbein & Cohen, 1999) which will have strong influence in their overall work performance and the company's bottom line. Robinson and Larsen (1990) defined work performance as "*the degree to which duties associated with the job are carried out*". Work performance is not only influenced by individual performance, but also by other factors and situational constraints, such as employee well-being (Nicole, 2008); and employee motivation (Fauzilah et al., 2011). Studies also have linked employee's attitude toward work performance (George & Brief, 1996; Suzana William Jalil et al., 2015). Empirical data generally suggests a positive job satisfaction-work performance correlation (Annierah M. Usop et al., 2013; Nasrin Ashadi, 2010; Petty, McGee & Cavender, 1984). In addition, a relationship also exists between organizational work performance culture and long term financial strength and business performance. Studies showed that companies having positive working culture, over an 11-year period, increased revenue by an average of 682%; enlarged their workforces by 282%; increased their stock prices by 901%; and enhanced net incomes by 756% (Kotter & Heskett, 1992).

In summary, to achieve organizational high work performance culture, a soft skills training and development program designed specifically to instill, build and change the employees' attitude and/or behavior play a major role apart from the many organizational functions, as stated by Heathfield (2008). In this present study, I will explore the impact of soft skills acquisition on the work performance of the individual trainees or learners; and will further investigate the influence of '*time space learning*' –

training methodology together with the trainer's effectiveness toward soft skills acquisition by the trainees or learners attending the soft skills training program.

## 1.2 PROBLEM STATEMENT

No doubt many factors can influence organizational performance, but strong corporate cultures are said to facilitate business performance by generating heightened motivation in employees (Kotter & Heskett, 1992). Businesses have spent immense funds in implementing changes using methods such as *total quality management (TQM)*, *self-directed work teams*, *business reengineering*, and so forth; and yet research has shown that at least two-thirds (2/3) of such change initiatives fail to achieve the expected results (Hesselbein & Cohen, 1999). According to Professor John P. Kotter from Harvard Business School, few of the change efforts accomplish their goals, and he further added that less than fifteen percent of companies he studied had succeeded in transforming their processes as intended (Hesselbein & Cohen, 1999).

Heathfield (2008) had identified training as one of the key elements for creating a high work performance culture in an organization. Training in hard skills alone is insufficient because soft skills which are synonymous with *core skills*, *key competencies* and *personal skills* are also needed (Gibbons & Lange, 2000). One big problem, however, could arise from the mindset of leaders and educators; whereby they could be unaware of how important soft skills training is or they deny support for prolonged work in this area (Nikitina & Furuoka, 2012; Osman et al., 2012). A mindset of soft skills as a 'waste of time and money' makes them reluctant to invest in soft skills training.

Research done by Pool and Sewell (2007) and Quek (2005) showed that employers prefer employees who possess soft skills competencies such as *interpersonal skills*,



*leadership skills, team working skills, innovative skills, problem solving skills, communication skills* and many others for work performance. Staffan Nilsson (2010) in his study found that *competence, interpersonal skills, and personal characteristics* significantly influence the employability of individuals. The problem with soft skills is that the education system does not concentrate on developing these skills in practice instead of in theory. Evelyn Shyamala et al. (2009) supported the infusion acquisition of soft skills remains highly concentrated on specific items/skills for both coursework and education only. If the educational institutes and establishment are to be effective in developing professionals who are competent leaders and managers, they need greater focus and emphasis on exposing learners to practical soft skills development (Rausch, 2004). Salih (2008) stated that graduates in Malaysia still lack the soft skills demanded by the competitive work environment. The human resource practitioners and employers too find local graduates lacking in relevant soft skills competencies (Hasbullah Shafie et al., 2011). The soft skills most lacking were identified by Gurvinder Kaur and Sharan Kaur (2008) were *problem solving, adaptability skills, interpersonal and team working skills, personal organization skills, communication skills, and leadership skills*.

In addition, in my over 32 years of corporate and management exposure, having consulted and trained numerous organizations (locally and overseas) I discovered that many organizations across all industries had invested in training and development in efforts to change to a higher work performance culture; but many still failed to achieve their objectives. To support this, similar evidence shown from existing studies found that two-thirds (2/3) of change initiatives (including training and development) had failed to achieve their intended results; and less than 15 per cent of companies that Professor John P. Kotter had studied have successfully changed and transformed themselves (Hesselbein & Cohen, 1999).

The present research study is on the Malaysian business working environment, and traditional training methodology or approach do not seem to succeed in helping learners or trainees to acquire these soft skills (Wilhelm, Logan, Smith, & Szul, 2002). The traditional training methodology or approach mostly focus on lecture-centered approaches whereby the trainer plays the role of information dispenser (presenting) while the trainees or learners act as passive receptacles (listen and take notes), resulting in the acquired knowledge not being transferred back to the job. The issue of acquired knowledge not being transferred back to the job (*no changes in the trainees or employees after attending the training*) could be due to the training methodology being used; and/or the trainer's effectiveness in delivering the training program; and of course, other factors beyond the scope of this study.

Study done by Tang et al. (2015) identified key issues of soft skills development in Malaysia. The study applied qualitative method which is different from the method adopted in the present study. However, the authors found that the factors accounting for failed soft skills development were noted as big class size, academic focus coupled with insufficient training period. Tang et al. (2015) concluded that an embedded model would better attain soft skills integration in course design. In addition, the Seetha (2014) study on essential soft skills in the workplace in Malaysia found that the soft skills gap is said to have caused the high graduate unemployment.

Therefore, the present study using the '*time space learning*' - training methodology in delivering a soft skills training program, intended to address most of the problems identified *i.e. insufficient period of the training; big class size; academic focus; and soft skills gaps*, since the soft skills training program designed in the present study will run for a period of two (2) to four (4) months with '*space break*' of 3 to 4 weeks in between

sessions; with only a class size of maximum 26 trainees; and focusing on applying and practicing what they had learned in the training back in their job in their real workplace environment.

In contrast, an empirical study carried out by Ahmad, Asri, Suhaili, and Jaslina (2014) focusing on soft skills for engineering programs at Malaysian polytechnics, with a sample size of 301 respondents (195 students and 106 lecturers) in civil engineering, showed that the sample had moderate communication skills and lifelong learning, entrepreneurship skills, moral and professional ethics. However, further result revealed students and lecturers had little difference in applying soft skills.

Hence, the present study to examine the degree of soft skills acquisition toward work performance using the '*time space learning*' - training methodology, will also address the problem identified, namely no statistical difference in soft skills application between students and lecturers, since the training program was designed to emphasize on practicality by asking trainees to implement their learned skills in the their workplace environment.

Another example outside Malaysia, involving an investigation into employee training at fast food outlets in Cape Town, showed that staff performances did not improve because number of days were insufficient, the method of training and development being used was ineffective, and there was poor follow up after the training (Ukandu & Ukpere, 2013). Thus, to ensure that the employees attending the soft skills training program will acquire the right knowledge and skills set, and will change their *behavior and/or attitude* that depicts their values and practices; the way the program is conducted (i.e., training methodology being used) and who is conducting it (i.e., the trainer's

effectiveness) should be thoroughly reviewed. In this situation, to address the problems from the above study, I intend to study the effect of the '*time space learning*' - training methodology being used, as well as the trainer's effectiveness, as the focus variables in imparting the soft skills to the trainees, learners or employees attending the soft skills training program.

In summary, from the abovementioned problem descriptions, this is where I intend to study and research in more detail on the area of: "*The Impact of Soft Skills Training and Development Using Time Space Learning on Work Performance*". The soft skills training and development will focus on building employee skills and changing their behavior and attitudes – through a practical method which can impact the organizational work culture toward higher performance. On the other hand, the variable '*time space learning*' - training methodology, which is one focus of this research, is to study the impact it has on soft skills acquisition by the trainees, together with the trainer's effectiveness variable. And through these soft skills training and development initiatives, I will then examine to what extent it has impact on the work performance changes of the individuals in their real workplace environment.

### **1.3 RESEARCH OBJECTIVES**

Many organizations had invested much on employee training and development in efforts to develop critical *skills, attitude/behavior* and *knowledge* of their employees; and to change their existing working culture to a higher work performance culture. Considering the problems identified in the preceding section, the present study research objectives (RO) are to study in detail on "*The impact of Soft Skills Training and Development Using Time Space Learning on Work Performance.*"

Realizing the importance of a high work performance culture contributing to the organization's bottom-line, specific objectives of this research study are as follows:

1. To examine the relationship between soft skills (SS) and work performance (WP).
2. To examine the role of training methodology (TM) on soft skills (SS) acquisition.
3. To explore the mediating role of soft skills (SS) acquisition in the relationship between training methodology (TM) and work performance (WP).
4. To examine the role of the trainer's effectiveness (TE) on soft skills (SS) acquisition.
5. To investigate the mediating role of soft skills (SS) acquisition in the relationship between trainer's effectiveness (TE) and work performance (WP).

NOTE:

The usage of the term training methodology (TM) in these research objectives (RO) signify that the methodology used in delivering the soft skills training program utilizes a '*time space learning*' - training methodology with '*space break*' of 3 to 4 weeks in between sessions.

As we can see in the research objective (RO) no.1 – *to examine the relationship between soft skills (SS) and work performance (WP)* – it indicates that the dependent variable is the WP and the SS to be the independent variable; but in the present study, the SS is in fact a mediating variable as from RO no. 3 and RO no. 5, which states clearly to explore and to investigate the mediating role of SS acquisition.

Soft skills are crucial in employee work performance. The Seetha (2014) study on the need for soft skills in the Malaysian workplace found that lack of soft skills is said to account for high graduate unemployment. Another study on novice teacher perceptions of soft skills needed in today's workplace showed that *team work skills* and *communication skills* were the two most important cited (Tang et al., 2015). In addition, the study by Mohd Yusri Ibrahim (2015) found that virtual leadership using mobile technology contributes significantly to intra-team communication and that in turn positively predicted job performance. Further studies by Tang, Ching, and Siti Asiah (2015) on the connection between soft skills mastery by teachers and teaching quality revealed that high performing school teachers displayed four (4) distinct components of soft skills namely *teamwork/collective work*, *communication skills*, *critical thinking* and *problem solving* as well as *leadership skills*.

Thus, we can conclude that soft skills are very important skills to have regardless of the discipline we work in; and soft skills are highly sought after by employers since they strongly believe that these skills are a must have (not just nice to have) skills in order to deliver higher work performance.

In relation to training methodology (TM) and trainer effectiveness (TE) variables, the research objectives (RO) no. 2 and (RO) no. 4 are to look at *examining the role of TM*

on the SS acquisition, and examining the role of TE on the SS acquisition by the trainees upon attending the soft skills training program conducted by the trainer (thus, trainer's effectiveness is being considered); and using '*time space learning*' – training methodology as part of this research.

Literature review on training methodology done in Malaysia had not shown any of that '*time space learning*' – training methodology being studied locally, but most studies were mainly on the other aspects of training methodology. For example, Nur Shafini Mohd et al. (2016) studied workplace training (on-the-job and off-the-job training methodology) towards employee job performance and not on '*time space learning*' per se. Thurasamy et al. (2012) studied e-training effectiveness but not '*time space learning*' either. Likewise, a study on online training effectiveness method by Nor Azilah Mohd Asarani et al. (2016) also shows the benefits of online training and recognized the critical factors influencing its successful implementation. A study by Chin Wei Chong et al. (2016), on managerial coach readiness, highlighted effective communication as an influencing factor on coaching effectiveness; and so did Ling Ying Leh et al. (2014) who acknowledged the impact of coaching on teaching self-efficacy and Geok Chew Gan et al. (2015) who revealed that both rapport and commitment significantly influence coaching effectiveness. One exception is the study by Kauffeld and Lehmann-Willenbrock (2010) in Germany on sales training with a sample size of 64 comparing between spaced learning and massed learning which resulted in greater transfer quality on the training for the '*space learning*' methodology.

As from the extant literature, none of the above studies done in Malaysia had shown any of that '*time space learning*' - training methodology being studied locally, but most were mainly on the other aspects of training methods. The other two research objectives

(RO) no. 3 and no. 5 concentrate more on investigating and exploring the mediating role of soft skills (SS) acquisition in relationship between training methodology (TM) and work performance (WP) as well as trainer's effectiveness (TE) and work performance (WP) respectively.

#### **1.4 RESEARCH QUESTIONS**

My research title or topic is on *"The impact of Soft Skills Training and Development Using Time Space Learning on Work Performance."* Hence, I would like to examine how the 'time space learning' - training methodology influences soft skills acquisition after attendance at the soft skills training program, as well as the trainer's effectiveness in delivering it; and to examine whether the soft skills acquired do make an impact on the trainees' work performance or not. Hence, among of the research questions (RQ) that I would like to consider are as follows:

- 1) Does the soft skills (SS) acquisition have a direct influence on work performance (WP)?
- 2) Does the training methodology (TM) have effect on the soft skills (SS) acquisition?
- 3) Does the soft skills (SS) acquisition mediate the relationship between training methodology (TM) and work performance (WP)?



- 4) Does the trainer's effectiveness (TE) have effect on the soft skills (SS) acquisition?
- 5) Does the soft skills (SS) acquisition mediate the relationship between trainer's effectiveness (TE) and work performance (WP)?

**NOTE:**

Similarly, as in the research objectives (RO) section, the usage of the term training methodology (TM) in this research study signifies that the methodology used in delivering the soft skills training program utilizes a '*time space learning*' - training methodology with '*space break*' of 3 to 4 weeks in between sessions.

## **1.5 SIGNIFICANCE OF THE STUDY**

It is a known fact that changes of employees' *mindset, behavior* and/or *attitude* as well as *skills*, which are a critical contributing factor for the work performance culture in any organization, will take time to realize. This is true based on the experience of other organizations whereby the process to change their organization work performance culture will take at least 5 to 10 years to complete (Donnelly, Quirin & O'Bryan, 2003; Porras & Robertson, 1992).

Findings from this research will be of significant value to many organizations (*private sectors, government or multinationals*) throughout the world, especially in Malaysia. It will be of significant value also to the human resource or human capital division or department of an organization when formulating yearly budget for their training and

development needs in both hard skills and soft skills. This present study contributes both theoretically and practically.

It will also benefit and contribute to the literature in enhancing work performance culture (i.e., to see the impact of soft skills acquisition on work performance, instead of stressing on hard skills only). And knowing also the difficulty in changing people's *mindset, behavior* and/or *attitude*; this research study examines the effectiveness of using '*time space learning*' - training methodology in the soft skills acquisition, when an organization invests in their employee training programs. It will also benefit other researchers to study on other variables that are contributing to enhancement of organizational work performance.

In addition to the abovementioned, I believe that the findings will be most useful and significant to the business industry as well as government and educational sectors, specifically in the human capital development in the following areas:

1. To identify the soft skills training and development curriculum/syllabus and design that focuses on *skill building, mindset, attitude* and/or *behavior change*, which will enhance employee work performance.
2. To identify what is required to make the soft skills training program more effective and impactful, as billions of dollars were being invested each year by the business industry worldwide in human capital development. Particularly, the '*time space learning*' - training methodology used in the training process. This specific area of study is a major contribution to the body of knowledge.

3. To identify what is required to ensure a good ROI (return-on-investment) to the organization in investing in the soft skills training program, by recognizing the importance of the trainer's competencies (*trainer's effectiveness variable*) selected in delivering or conducting the soft skills training programs such as competencies in *motivating* the participants, *interpersonal skills* in interacting with the participants, *coaching* the participants, *presenting* the training materials, showing the *relevancy* to the workplace and business, and so forth in order to get the expected desired results.
4. To determine their ROI (return-on-investment) in terms of work performance improvement by investing in employee soft skills training and development instead of focusing on investing in hard skills only.
5. To inculcate change in the mindset of some top management or leaders who do not believe in (or are ignorant of) soft skills training contributions to their bottom-line. Their mindset and belief is that soft skills training and development is a '*waste of time and money*'; hence, to make them see that soft skills training and development of employees is not just a '*feel-good*' exercise but a necessity if the organization wants to create a higher work performance culture. In addition, to change their perspective in seeing training not just as a 'cost' or 'expense' but as an 'investment' toward their organizational bottom line.
6. To help the human resource or human capital division/department in an organization to easily justify to their top management (*for budgeting and approval or policy making*) on the importance of soft skills training and development investment for their employees each year; which will impact

directly on the organization's bottom line, as the employees enhance their work performance.

7. To help the human resource or human capital division/department to effectively plan how the soft skills training and development of their people should be delivered and conducted. In this case, by using the '*time space learning*' - training methodology to ensure the *skills and behavior/attitude change* of their employees which will lead to higher work performance in their organization.
8. To help future researchers to study in greater depth on other related areas (or variables) in creating a much higher work performance culture in any organization – big or small.

## **1.6 ORGANIZATION OF THE STUDY**

The introduction in Chapter One discussed an introduction to the research study concerning organizational work performance culture – its definition and importance of having a work performance culture for any organization to succeed. It includes the theoretical foundation which was supported by literature review. These were followed by statement of the problem, research objectives, research questions, significance of the study, and organization of the study.

Chapter Two provides a review of the literature on all the variables applied in this research study namely trainer's effectiveness (TE), training methodology (TM), soft skills (SS) and work performance (WP). In the first section, an overview of the soft skills and their importance is discussed in detail. This is followed by a discussion on the related theories on soft skills (SS) as well as how soft skills affect work performance

(WP). It also covers the soft skills development in Malaysia. The review of the literature also discussed the training methodology (TM) used, with emphasis on '*time space learning*' – training methodology, to acquire the soft skills in the training and development program conducted. The literature review also discussed various training methodologies used by many organizations and their effectiveness. This chapter also pointed out the learning theories with emphasis on adult learning theory, Kolb's experiential learning theory, and '*time space learning*' or the 'spacing effect' theory. In this literature review, I also discussed trainer effectiveness (TE), its role, characteristics, competencies, credibility, its work behavior and style, as well as Kirkpatrick's four levels of evaluations. The chapter also includes the issues discussed on trainer's effectiveness and the past research on trainer effectiveness. As for work performance (WP) literature review, the chapter covers issues relating to work performance as well as factors that hinder or contribute to work performance. It also touches on the criteria for measuring work performance before moving into measuring the employees' work performance and on how soft skills competencies relate to work performance.

From the literature review presented, I developed various hypotheses in this present study, based on the variable discussed. Then I created a conceptual framework (see figure 2.1) which consists of the independent variables (IV) in the present study; and they were represented by the trainer's effectiveness (TE) and the '*time space learning*' - training methodology (TM); whereas work performance (WP) represents the dependent variable (DV). In this study, soft skills (SS) was proposed as a mediating variable (MV) whereby the training and development curriculum/syllabus will be incorporated in the soft skills training for work performance enhancement and will mediate the IV-DV relationships. This is followed by a summary at end of the chapter.

Chapter Three explains the overall research methodology used to collect the data to address the research issues. It starts with the research design process followed by the information about the sample population, sample size and sampling procedure used in the study; the instrumentation used to measure the variables (SS, WP, TE, and TM) in this study together with its validation and reliability from the pilot study. The chapter covers the development of the items in the instruments, assessing the instrument content validity and assessing the instrument reliability using the Cronbach's alpha reliability coefficients. The chapter also details the process of data dissemination and collection. The data analysis procedure section explains the two (2) phases of data analysis employed in the study, whereby the first phase involved descriptive statistics and the second phase revealed the single group analysis.

Chapter Four details the presentation of the quantitative results and findings. It provides the results of the data analysis that addresses the five (5) research questions and hypotheses of this present study. The first section provides a descriptive analysis and it discussed the distribution of samples including a detailed breakdown of: (i) demographic summary of respondents such as gender, education, age, and so on; (ii) descriptive statistics such as mean scores, standard deviations, skewness and kurtosis; and (iii) the Cronbach's alpha and composite reliability scores. The second section presents the results of the measurement model for this research topic. The third section presents the estimation of the full-fledged Structural Equation Modeling (SEM) based on one hypothesized model. Meanwhile, the testing of factorial validity is reported. The chapter describes and reports the results of the statistical analysis, which sought to identify the factors influencing the dependent variable of work performance. The results derived from the analysis, carried out to test the five (5) hypotheses proposed in the earlier chapters, are reported and elaborated in this chapter. To address the research

questions, a statistical analysis tool – Structural Equation Modeling (SEM) – was applied to test the validity of the full-fledged latent variables research model which resulted in an acceptable model fit and to test the five (5) hypotheses in this study. The direct and indirect effects in this study are shown in this chapter through taking account the regression coefficient in the path analysis. Additional full blown discriminant validity test was added (comparing square root of AVE with construct correlations and developing the cross-loading matrix). Further mediation analysis was performed apart from Sobel test (i.e., using the traditional mediation test of Baron and Kenny, 1986). In addition, a non-response bias test and common method bias assessment was performed to ensure thorough analysis. Finally, the chapter ends with a summary of the results obtained for the five (5) hypotheses stated in this study.

Chapter Five presents the discussion of the results of the research questions and hypotheses posed in chapter one. The chapter then discussed the theoretical and methodological implications of the study. It also highlighted the implications of the study in organization's employee development to enhance their work performance. The limitations of the study are reviewed, followed by recommendations relating to the findings in this study for future research. The chapter finally concluded with an overall summary of the research, its finding and contributions.

## **1.7 SUMMARY**

This chapter provides the foundation of this research. It started with the background of the study to illustrate the importance of this study with supporting literature reviews. It explains the main research problem and provides the five (5) research objectives for investigation. This is followed by the five (5) research questions of the study. The

conceptual framework was presented together with the established relationships among various variables (*dependent, independent* and *mediating*); and the five (5) research hypotheses to be tested, to provide answers for this research study. The significance of this research and the scope and limitations are also outlined. Lastly, it outlines the structure of the entire thesis.

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## CHAPTER 2: LITERATURE REVIEW

### 2.1 INTRODUCTION

This literature review aims at confirming needs for this research. In this chapter, the discussions are broken down according to the constructs identified in the researcher's present study namely: *Trainer Effectiveness (TE)*, *Training Methodology (TM)* – ('*time space learning*'), *Soft Skills (SS)*, and *Work Performance (WP)*.

This chapter begins by highlighting the significance of soft skills in work performance enhancement by focusing on literature related to the soft skills concept including: its definition, importance, related theories on soft skills, how soft skills affect work performance, and issues related to soft skills as well as soft skills development in Malaysia. In acquiring these soft skills through training and development programs, extant literature review is being done on the training methodology being used including OJT (On-The-Job) training; classroom or (Off-The-Job) training; '*time space learning*' training method in acquiring the soft skills learned; and appropriate learning theories to see the effect of spaced learning, being comprehensively discussed.

Another component affecting soft skills acquisitions is trainer effectiveness. Literature review on this component includes the trainer's role, competencies, characteristics and credibility, behavior and style, as well as the evaluations of the training and the trainer; consistent with Kirkpatrick's four (4) levels of evaluation. This chapter will also discuss issues and past research on trainer effectiveness.

Finally, this chapter will discuss the dependent variable in this present study, which is crucial to this research (i.e., the work performance enhancement from the soft skills acquired) including issues discussed on this component, and the factors that hinder or contribute to work performance. Also discussed are the criteria for measuring work performance, the measurement of employee work performance, and the relationships of soft skills competencies with work performance. The chapter ends with an overall summary.

## **2.2 SOFT SKILLS (SS)**

### **2.2.1 Introduction to Soft Skills**

The current literature suggests that to be competitive in the dynamic business world today, one needs to possess both soft skills and hard skills. Maniscalco (2010) stated that soft skills refer to the “*cluster of qualities, habits, personality traits, attitudes and social graces*” which everyone tends to possess in various degrees, and are needed for daily existence as well as for work. Similarly, Lorenz (2006) defined soft skills (as cited in Hinds-Smith, 2009) as “*a cluster of personal qualities, habits, attitudes and social graces that make someone a good employee and a compatible coworker*”. However, Gibbons and Lange (2000) maintain that the term ‘soft’ skills relate to core skills, key competencies and personal skills.

Therefore, soft skills are the abilities essential in individuals which are necessary for good social relations at the workplace. Soft skills are usually hard to detect, quantify and measure. For example, some people befriend others easily, which is regarded as being a valuable soft skill in marketing and sales. Others are very punctual, or able to

make rational decisions under pressure. People may also have the skill for team work with employees from other cultures, or learn other languages fast. These are often considered as inborn skills. In contrast, '*hard*' skills at work refer to technical or administrative procedures related to an organization's business (Maniscalco, 2010). These hard skills (i.e., job related skills) are often easier to quantify and measure, and easier to teach and acquire because the skill sets are new to the learner and no unlearning or behavior/attitude change is involved.

The skill sets required for workplace success have altered appreciably over the past decade. Companies are seeking more prepared employees who are more adaptable, responsible and teachable to help meet challenges of the competitive global economy (Pihir, Calopa, & Brodar, 2008; Tierney, 1998). Accordingly, corporations now expect their staff to demonstrate excellence in many '*softer*' skills such as teamwork and group dynamics (Rothwell, 1998). Employers want to take advantage of these vital soft skills of their employees obtained during training and work experience, rather than just degree-specific knowledge (Raybould, 2005). For outstanding project management organizations demand a combination of competencies including *interpersonal ability*, *technical competencies*, and *cognitive aptitude*, along with an ability to grasp a situation and understand others coupled with the dynamism in integrating the appropriate leadership behaviors (Strang, 2007).

Mantel, Meredith, Shafer, and Sutton (2004) categorized soft skills into six (6) areas namely *communication*, *organizational*, *team building*, *leadership*, *coping*, and *technological skills*. Thomas (2009) and Katz (1991) suggested that effective administration rests on *human skills*, *conceptual skills* and *technical skills* which can be developed independently. Additionally, Esa, Alias, and Samad (2014) together with El-

Sabaa (2001) opine that project managers' soft skills have the greatest effect on project management practices and technical skills the least. Tracy (2012) explained that when one has *self-confidence* and/or *self-assurance*, one will have faith in one's strengths, be able to take risks, meet new challenges, and be able to deliver as most appropriate as possible. The author concludes that self-assurance is even more important than self confidence in that one has confidence in one's judgment too.

Soft skills are also a sociological term relating to a person's 'EQ' (Emotional Intelligence or Quotient), the cluster of personality traits, social graces, communication, language, personal habits, friendliness, and optimism that characterize relationships with others (Kamaruddin, Kofli, Ismail, Mohammad, & Takriff, 2012). Soft skill in EQ is a key component of the person's contribution to organizational success (Kamaruddin et al., 2012). Soft skills, also called people skills, and are not easily taught although they are very much needed for leader-follower interaction. Such capabilities can be grouped into three (3) major categories namely, *personal attributes*, *interpersonal skills*, and *problem solving and decision making skills*. Moreover, the Ministry of Higher Education Malaysia (MOHE, 2006, p. 5) describes soft skills as "*generic skills that include cognitive elements related to non-academic abilities, such as positive values, leadership, teamwork, communication and lifelong learning*". Soft skills are divided into seven (7) areas and they are (1) Communication skills, (2) Critical thinking and problem solving skills, (3) Team work, (4) Lifelong learning and information management skills, (5) Entrepreneurship skills, (6) Ethics and professional moral skills, and (7) Leadership skills (MOHE, 2006, pp. 9-13). Each area has "must have" and "good to have" skills (Nikitina & Furuoka, 2012).

It is very obvious that many studies noted that human factors play a critical role in the project or task achievement (Anton, 1998; Belassi & Tukel, 1996; Pinto & Selvin, 1998; Zarina Alias et al., 2014). In a nutshell, extant studies revealed that the soft skills elements that are frequently cited and identified as important are: *self-confidence or self-assurance* (Tracy, 2012), *interpersonal or human relations* (Honey, 1988; Katz, 1991; Strang, 2007; Tang, 2012; Thomas, 2009), *communication* (Leigh, Lee, & Lundquist, 1999; Lussier, 2012; Mantel, Meredith, Shafer & Sutton, 2004), *attitude* (Mueller, 2012), *leadership skills* (Tang, 2012; Mantel, Meredith, Shafer, & Sutton, 2004; Rosenau, 1998), *management skills* (Boyatzis, 1982; Tang, 2012), *creative thinking* (Matteson, Anderson, & Boyden, 2016; Rosenau, 1998), *problem solving* (ITS, 2016; Leigh et al., 1999; Lussier, 2012), and *critical thinking, team work, lifelong learning, ethics and professional moral skills* (MOHE, 2006, pp. 9-13; Leigh et al., 1999).

### **2.2.2 Importance of Soft Skills**

The importance of soft skills has been acknowledged in the managerial occupation by Career Advice (2016) and Boyatzis (1982) and across cultures by Hinds-Smith (2009) and Nonaka and Johansson (1985). Soft skills such as conflict management and information management are demanded by organizations, according to Zedeck and Goldstein (2000). Again, in a study by Hinds-Smith (2009) and Leigh et al. (1999), the authors express that workplace competencies do not exclude *problem solving, communication skills, personal qualities* and *work ethics* as some of the categories of soft skills. However, managers lacking the aforementioned soft skills might be unable to perceive, hinder or tackle problems on time or effectively, hence adding to project failure (Jha & Iyer, 2006; Srica, 2008; Turner, Muller, & Dulewicz, 2009).

In 1982, Boyatzis was among the first to study and describe managerial competencies. His study aimed at identifying the factors associated with competencies linking the effectiveness of a substantive manager. In addition, studies conducted by Campbell (1990) proposed eight (8) dimensions of job performance classification; and through sorting of critical incidents, Sonnentag, Volmer, and Spsychala (2008) and Borman and Brush (1993) agreed upon categories of management performance. Kantrowitz (2006) developed a taxonomy describing five (5) dimensions of soft skills inclusive of *communication, problem solving, conflict resolution, goal setting and planning* and *task coordination*. Studies on financial success done by Carnegie Foundation of Advance Teaching (CFAT) and later confirmed by Carnegie Institute of Technology (CIT) many years back discovered that 15% of an individual's financial success is attributed to the knowledge gained, while the rest is due to '*human engineering*' skill (Carnegie, 1981). Furthermore, personality which enhances career prospects and maintenance coupled with the ability to lead people as part of the soft skills area is important in this present study (Moin & Biswal, 2012).

Universities are the major feeder of employees to industries, and because graduate job seekers need to have soft skills, many universities are now seeking ways to inculcate soft skills in their graduates. This is imperative now with increasing need for project management skills following various projects being undertaken by organizations. Project management involves a range of roles and responsibilities requiring soft skills to be gained from training programs. Most project management training in universities, however, focus on technical or hard skills deemed essential for project success, or the "iron triangle" of time, cost and quality (Atkinson, 1999; Tang, 2012). This is because technical skills are easier to inculcate than the soft skills (Yen, Lee, & Koh, 2001). Project management is seen as the new form of general management enabling

organizations to integrate, plan, control, and schedule intensive and one-of-a-kind endeavors in order to improve overall organizational performance (Kloppenborg & Opfer, 2002). To increase relevance of education to workplace realities, many universities are integrating project management courses as electives or offering it as a core program.

In any organization, effective professionals must have state-of-the-art knowledge and technical abilities, and must also be able to cooperate in and across teams. Effective teamwork entails mastering specific abilities, such as *leadership*, *coordination* and *conflict management*. This implies that higher education for future professionals must include soft skills acquisition besides having the technology to support them (Rugarcia, Felder, Woods, & Stice, 2000). In contrast, traditional courses seem lacking in delivering this sort of skill (Wilhelm, Logan, Smith, & Szul, 2002). Most of studies focused on teaching technical contents and they usually adopt teacher-centered approaches geared toward examinations. This trend, however, is changing (Howell, Williams, & Lindsay, 2003) and many teachers are implementing student group work. But this so-called group work is strongly focused on obtaining an outcome, and how the group managed its achievement may not be that relevant (Johnston & Miles, 2004). Students work as individuals and only get together to integrate the outcome, thus keeping peer interaction to a minimum (Vik, 2001).

Furthermore, the adoption blended learning in higher education through Learning Management Systems (LMS) has not been helpful either. Unless properly guided, the LMS increases the decoupling of members and tasks even further. The virtual organization may enhance students' time usage, but it also decreases social interchange that exercise their soft skills (Oren, Mioduser, & Nachmias, 2002; Robey, Khoo, &

Powers, 2000). Employers are less satisfied with young job applicants not because they have inadequate technical knowledge but because they are found wanting in non-cognitive or non-technical ability, as Wentling noted in 1987. Literature review indicated that employers acknowledge the skills performance of today's graduates, but they have strong reservations regarding their non-technical abilities (Seetha, 2014; Wentling, 1987).

The teaching of social skills and social values (non-cognitive skills), either through an explicit curriculum or through integration in technical assignments and laboratory work, would allow apprentices to conform to the performance norms and expectations of any profession. Deil-Amen (2006) asserts that the lack of relevant social skills may impede upward mobility of low income graduates. Deil-Amen (2006) further argued that social skills should be taught to low income students to remove barriers to their career achievement. In fact, these skills are integral partners of technical knowledge and skills to ensure good job performance in organizations. With present emphasis on knowledge workers, combining technical knowledge and skills with human and social competence in developing co-workers is critical for sustained economic growth, especially in developing economies. Zenger and Folkman (2002) contended that the old paradigm of separating core academic curriculum from leadership, character and life skill education in schools in many developed countries is shifting. Classes in leadership will be equally important as those in mathematics, science or English; and from a career standpoint, possibly even more significant (Zenger & Folkman, 2002). In the competitive business world holistic knowledge workers are required to be competent, versatile, creative and willing to learn from others' best practices. This is because mergers, acquisitions and downsizing are creating fierce competition for a limited number of jobs; hence, those with good attitudes and task commitment have the career edge (Sail & Alavi, 2007).



In 1987, Buck and Barrick offered another name for those “non-technical abilities” as “employability skills”. The authors further defined employability skills as “*the attributes of employees other than technical competence that make them an asset to the employer*” (Buck & Barrick, 1987, p. 29). These social skills are becoming important among the Malaysian workforce including coaches and trainers in public and private institutions. Sometimes these trainers have little knowledge of social skills and social values and have not been formally exposed to soft skills in their pre-service or in-service training programs. They are also unaware of how essential these social skills are in producing knowledge workers. Alavi (2010) as well as Herr and Johnson (1989) concluded that general employability skills can be learned; therefore, these are appropriate targets for professional interventions.

Considering the importance of social skills and social values in a vocational education and training curriculum to produce k-workers, the skills must be part of an explicit curriculum and taught to apprentices or trainees. Many policy makers and curriculum experts in vocational education and training in the past have argued that social skills are not critical for inclusion in a technical curriculum as they are naturally acquired through social acculturation. This has resulted in social skills and social values being abandoned, hence causing knowledge deficit to students in the aforementioned areas.

Similarly, Lussier (2012) argued that industries appreciate non-cognitive or personal attributes such as *trustworthiness*, *loyalty* and completing assignments on time with high quality product. But these attributes do not appear in apprentices automatically. Instead, they have to be taught and developed like any other technical subject or skill. Trainees will achieve career success only when they have both technical expertise as well as a strong base of soft skills encompassing *leadership*, *communication skills*, *self-*

*discipline, integrity, and moderation in outlook and actions.* Lussier (2012) concluded that good job performance depends on technical as well as social competence and that career advancement is determined more by social skills and social values rather than by technical skills alone; thus, social competence cannot be left to happen naturally through influence of family, peers and society.

Teaching of social skills and social values to trainees is possible only when training coaches and trainers themselves acquire the knowledge and skills to do so. They must be trained through training-of-trainers (TOT) programs to acquire core social skills and also to master techniques of instruction in the process of producing competencies required of a k-worker in the National Dual Training System (NDTS). Successful k-workers interact positively with supervisors, fellow workers and clients, besides communicating effectively. A k-worker should display self-directed learning by continuously improving his or her competency in coping with advances in technology in order to produce the highest quality product. In short, the successful k-worker has a positive work attitude and high organizational commitment (Sail et al., 2007).

Research gaps in current studies are obvious here, after thorough review of past literature. Most of the past studies on softs skills concentrated mainly on the importance of having soft skills, and the need to have them. Past studies also focused more on soft skills in the educational environment instead of the business working environment. The Staffan Nilsson (2010) study on enhancing individual employability found that technical vocational skills are considered to be declining in importance; these hard skills are generally seen as less critical for employability compared to soft skills and personal attributes. A study on employability in the 'ME generation' by Senior and Cubbidge (2010) showed that undergraduates do appreciate the importance of technological

innovation in the classroom, but they see the development of work-based and soft skills as more important. In addition, a study on the correlation of event planners' personality traits, soft skills competency and self-leadership by Chareen Wan Gould (2011) revealed that those lacking soft skills have a lower self-leadership capacity. Similarly, Clarke (2016) in the United Kingdom showed that the soft skills gap is not only problematic for young employees, but is affecting career advancement at all levels.

Likewise, past studies on soft skills particularly in Malaysia also emphasized more on the importance and the needs of having these soft skills, rather than effectiveness in acquiring the soft skills in a training program via the trainer and the training methodology being used, and its effect on work performance, which is the focus in this present study. Moreover, most studies focused on educational aspects (schools and tertiary education) and very rarely on business work performance aspects. For example, the N. Seetha (2014) study on soft skills importance at work found that the soft skills gap plays a role in high graduate unemployment. Another study on novice teacher perceptions of the soft skills needed in today's workplace showed that team work skills and communication skills were the two most important soft skills components very much needed in their workplace (Tang et al., 2015). A study by Aminuddin et al. (2008) on improving students' soft skills through university-industry collaborations revealed the benefits to the university, including production of competitive graduates with good soft skills in the job market and to produce graduates who meet industry needs. Additionally, Mohd Yusri Ibrahim (2015) found that virtual leadership using mobile technology contributes significantly to intra-team communication and the intra-team communication positively predicted job performance.

As we can see, the extant literature does not consider the relationships between ‘*time space learning*’ training methodology (TM), trainers’ effectiveness (TE), soft skills (SS) and work performance (WP), which are of great concern to the present study. Hence, a clear indication of a research gap exists from past studies versus the present study prompted me to discover the relationship between soft skills acquired from the training program attended (conducted by the trainer and using ‘*time space learning*’ - training methodology) and subsequent work performance of trainees.

### **2.2.3 Soft Skills Development in Malaysia**

Malaysia’s STAR newspaper, on April 2, 2005, quoted what former Human Resource Minister Datuk Dr. Fong Chan Onn said: “*Many graduates cannot find jobs because they lack soft skills like communication, public relations and interactive skill to complement their academic qualifications.*” The National Centre on Educational Quality of the Workforce (NCEQW, 1999) carried out a survey of 4,000 private employers and found that “*employers place even more consideration on non-cognitive behaviors than on cognitive skills, ranging from basic attendance, cooperativeness and attitudes to social interaction, participation, leadership, effort and preparation.*” (Rosenbaum, 2001, p. 173). The Malaysia Employers Federation (MEF) (2010) did a survey on what is needed and required by employers from an employee, and the findings revealed that 68% was on *communication skill*, 56.2% on *interpersonal skill*, and 55.7% on *passion and commitment* (attitude) of the person. Again, this shows the importance of having soft skills (apart from hard skills) in an employee for the organization (be it in Malaysia or globally) to succeed in a dynamic business environment.

One of the major challenges of leaders and managers is the issue of managing human resources for achieving their specified goals. An individual leader or manager cannot solely implement institutional responsibilities without cooperation from subordinates. Hence working with people in an organization is imperative for a leader or manager; leadership requires specialized skills which could enhance interpersonal relationships. In order to achieve that it is important to have an avenue where soft skills traits should be inculcated in the potential leader of any community.

The Malaysian government is aiming at inculcating soft skills and leadership traits in their stakeholders for national growth and development. Leadership skills are indeed one of the important soft skills areas. Leadership as a concept has been discussed from various perspectives. Traditional paradigms and theories have been used to describe and define leadership (Dansereau, Seitz, Chiu, Shaughnessy, & Yammarino, 2013). The main message from the definitions and the paradigms is that leadership is generally described as an interpersonal process in which a leader influences followers (Dansereau et al., 2013). For instance, Steel (2012) defined leadership as:

*“A leader isn't limited to those with positional authority. Leadership, instead, is defined alternatively as someone who influences others to achieve a common goal. This would represent the work and contributions of anyone who serves in this capacity.”* (Zenger et al., 2012).

In most definitions, the basic elements of leadership usually include a leader, a follower, and their relational interactions. The major issue in leadership is how a leader could influence the follower efficiently through relational interactions in order to achieve the stated goals of the institution. From this, to be a good leader one requires some soft skills traits to gain followers' support, attention as well as cooperation.

Soft skills formation at a tertiary level has been an education policy in Malaysia since 2006 (Nikitina & Furuoka, 2012). It is believed that soft skills could be appropriately inculcated through education. This is substantiated by the study conducted by Hayward and Fernandez (2004) when they cited a speech given by former British Prime Minister, James Callaghan, in 1976 at Ruskin College as the starting point of the discourse on soft skills formation in educational institutions. Therefore, current development of soft skills is included in school curricula and is a part of vocational education and training in many countries (Taylor, 2005). Based on this, Malaysian policymakers also have been emphasizing soft skills development at tertiary level (Nikitina & Furuoka, 2012).

Empirical studies have been carried out in several areas in Asia, specifically Malaysia. For instance, a study by Ahmad (2013) was conducted on soft skills in Malaysian tertiary education. The study that used over 300 participants as the sample, showed mean score ranging from moderate to high which indicates that the students in general are reasonably self-assured in terms of their acquired soft skills proficiency. This is in contrast to the feedback received from employers in Malaysia as discussed earlier. Further findings indicated that perceptions on soft skills proficiency are affected largely by socio-demographic factors of gender, area of residence and types of schools.

Contrary to the abovementioned, Abdul Karim et al. (2012) conducted an empirical study to compare the soft skills acquisition between public tertiary institutions and private institutions with research data obtained through the Malaysian Soft Skills Scale (My3S) instrument whereby students rate their ability in various skills grouped into seven (7) categories. The findings show that mean score achieved for each of the seven soft skills ranged from 6.3 to 7.8 out of a possible 10, indicating that students from public institutions rated themselves as being more proficient than their counterparts in

private institutions with substantial significant differences obtained in all seven soft skills categories. In all, the study suggests that all tertiary institutions should review their curriculum and recommend engagement in student-centered activities such as problem based learning, presentations and case studies to be focused in teaching and learning in line with the suggestion made by Abdul Karim et al. (2012).

Malaysian public universities have already embarked on initiatives to integrate soft skills into the formal curriculum to produce graduates with a right balance of diverse abilities (Devadason, Subramaniam, & Daniel, 2010). Similarly, Fong, Sidhu, and Fook (2014) did an exploratory study investigating the 21st century skills among postgraduates from a public and a private university in Malaysia. The study sample involved fifty-nine (59) postgraduate students, and four (4) lecturers, and data were collected using questionnaires and semi-structured interviews. The findings revealed that postgraduates articulated success in using ICT skills, collaborating, and lifelong learning in being leaders, but lacked critical and creative thinking and communication skills. Other findings were that postgraduates were successful in working collaboratively. Respondents indicated their ability to interact well with people at work and in society. Lifelong autonomous skills were shown perhaps because most of the respondents were working class adults doing postgraduate courses. The least mean score was recorded for entrepreneurial skills showing that the majority of them were unable to draw a good business plan for a new venture.

Meanwhile, most of the abovementioned studies focused on work related soft skills. However, it should be noted that soft skills are more important and needed by leaders who control, administer and manage human resources. If leadership is weak in soft skills, it might affect the growth of the whole organization no matter how skillful the

workers or followers. That is why Tang (2012) affirmed that employees also need leaders with critical soft skills. Tang, Prachak, and Saowanee (2013) carried out a study to examine the leadership soft skills of deans in three (3) public universities in Malaysia from the perception of their support staff. The qualitative study involved face-to-face interview with twelve (12) support staff. The results reveal that 50% of the respondents were working with the deans with reportedly high leadership soft skills while the remaining 50% representing six (6) interviewees were working under the deans with reportedly low leadership soft skills. Deans with good soft skills promoted collaboration, solved staff problems, and held meetings with staff to iron out problems, compared with deans having poor soft skills. Hence, the study advocates the importance and value of leadership soft skills in tertiary institutions.

A cross-sectional survey research was conducted by Wongkalasin et al. (2013) to examine the leadership soft skills affecting organizational climate; the study employed mixed method design where questionnaires were administered to 121 respondents; and also 8 informants were interviewed. The researchers found that the level of leadership soft skills employed by district health officers is high. Likewise, the level of organizational climate was high. Moderate positive relationship was found between leadership soft skills and organizational climate at significant level ( $r = 0.569$ ,  $p < 0.001$ ). Soft skills *personal mastery* and *planning* significantly predicted organizational climate ( $r = .321$ ,  $p < 0.001$ ). In-depth interview findings suggested that district health officers should pay attention to organizational climate dynamics.

An empirical study was conducted in Malaysia by Ismail (2013). The study investigated the importance of soft skills to accounting students using quantitative method with 450 survey questionnaires administered on both students and practitioners. The results



reveal the top three (3) reasons for the importance to inculcate soft skills among accounting graduates. They are: (i) to provide high quality and professional services - with mean and standard deviation of 4.76 and 0.629 respectively; (ii) to fulfil employer expectations – with a mean score of 4.39 and standard deviation of 0.715; and (iii) lastly, to have better career prospects - with statistical mean score of 4.26 and standard deviation value 0.803. This indicates that accounting students should realize the importance of acquiring soft skills and equip themselves with these soft skills.

A study by Tang, Ching, and Siti Asiah (2015) investigated the relationship between soft skills acquired by teachers towards their quality of teaching, in Penang, Malaysia. For the study a total of 190 teachers from three high performing primary schools in Penang were involved. The quantitative research used a survey questionnaire for data collection. The results revealed that high performing school teachers possessed four (4) distinct components of soft skills namely *teamwork/collective work*, *communication skills*, *critical thinking and problem solving skills* as well as *leadership skills*. Further analysis shows that the overall soft skills mean score of 3.28 and standard deviation 0.36; and quality teaching mean score of 3.22 and standard deviation 0.35 – indicating high level. Additionally, soft skills acquired and the other three (3) components viz-a-viz *critical thinking and problem solving skills*, *teamwork/collective work skills* and *leadership skills* are significant and positively linked with quality teaching. Findings also revealed that *critical thinking and problem solving skills*, *teamwork/collective work skills* contributed 40.3 percent and 3.5 percent of variances on quality teaching respectively. The study concluded that teachers need training in soft skills for effective teaching. However, the focus of the present study concerns more on soft skills acquisition by trainees after attending the soft skills training program, and how much it affects the trainees' work performance; this aspect is not being studied in Malaysia.

In contrast to the above, one study by Tang, Chan, and Vetriveilmany (2015) identified critical issues of soft skills development in Malaysia. The study applied qualitative method which is different from the method adopted in the present study. The authors found that the factors contributing to failure of soft skills development were big class size, academic focus and insufficient training duration. Tang et al. (2015) concluded that an embedded model would be better for ensuring soft skills integration in every course design.

An empirical study was carried out by Ahmad, Asri, Suhaili, and Jaslina (2014) focusing on soft skills for engineering programs at polytechnics in Malaysia. The sample for the study comprised 195 students and 106 civil engineering lecturers at Malaysian polytechnics. The authors applied quantitative approach using questionnaires and analyzed using SPSS. The results showed that communication skills and lifelong learning are moderate. Others are entrepreneurship skills, moral and professional ethics. Further result revealed no statistical differences were discovered between students and the lecturers in soft skills application. This indicates that the lecturers used variety of soft skills to improve the level of soft skills among civil engineering students to achieve moderate value; but the application of soft skills which were no difference could be due to more academic focus instead on real life practical application.

Generally, it could be seen from the literature that Malaysia is making ardent effort to improve soft skills in many ways. However, more emphasis was placed on education from tertiary level to school level. Based on the literature and for the holistic acquisition of the aforementioned soft skills, it will be good to start the soft skills on leadership development from primary school. Soft skills training is not just what should be taught in the classroom, because it is better learnt through practice than teaching. Based on

this, opportunity should be given to those proficient in the skills to demonstrate them for the other students or colleagues, so that they could serve as role models. Besides that, students need more opportunities to practice those skills for better mastery. This can be implemented by giving students leadership roles in schools with little or no intervention from the staff, for assessment later. The literature showed that some of the tertiary institutions that create soft skills activities in their curriculum do not have enough time for the program: hence, enough time should be given for implementing these leadership soft skills training among students, in order to ameliorate the problem inherent in lack of such skills. It is believed that if all the above suggestions can be implemented, it will go a long way to ensure nation building as well as organizational effective work performance. However, the studies conducted in Malaysia on soft skills by various authors as enunciated before, did not examine the soft skills acquired from attending a training program conducted using ‘*time space learning*’ training methodology in relation to workplace performance which is vital to the present study.

#### **2.2.4 Related Theories on Soft Skills**

Review of the management literature suggests that the early motivational theorists such as McGregor (1967), Blake and Mouton (1964) and Likert and Hayes (1957), considered that an effective manager needs to “*show concern for people, build trust, show sympathy and involve people's emotions*”, for example, in solving day to day problems. Honey (1988) developed this further in the early 1980s by suggesting that interpersonal skills are face to face behaviors that people use when they wish to achieve something useful with the help of, and through others. Burgoyne, Hirsh, and Williams (2004) and Peters and Waterman (1982) consider that behaviors and competencies make an effective people manager. They suggested that effective people managers need to

*“communicate well, inspire others, lead their people and show empathy”*. It appears that, in more recent years, there has been some development in the perception that managerial competencies, on their own, do not make an effective people manager. Fisher (2006) suggested that behaviors behind these competencies are becoming increasingly recognized as the driving force making a difference in effective people management.

Furthermore, a study by Kets de Vries (2001) maintains that individual well-functioning should be a priority on the managerial agenda. He considered that behavior is observable and that managers need to display open and authentic behavior if they wish to build long-lasting relationships with their project team. They should build an understanding of what makes the other person tick or what is important to them. He refers to this as *“authentizotic”* behavior. Trompenaars and Hampden-Turner (1993, 1997) also considered understanding different cultures as an important people skill. They suggested that managers need to understand the values and hold to the belief people from different cultures hold; why this is the case; and what the direct impacts are on their behaviors in certain work situations. Managers need to realize that what works well in one culture does not necessarily work well in another. They further suggested that managers need to develop an understanding of what the various trends, sequences and traditions are for the people they work with and also to manage people effectively at international level. This is an important consideration as more businesses globalize and expand beyond the borders of many countries at once.

Kliem and Ludin (1992) in their review of project management considered that successful project managers recognize the importance of managing people in projects effectively, by applying a number of people management skills. They suggested that

project managers need good interpersonal skills such as showing empathy for the feelings of others, having ability to see things from others' perspectives and respecting others for what they are. However, evidence shows that conflict management in a project environment is as inevitable as change (Verma, 1996). Project managers need to know that conflicts exist on many levels and that each level entails a different approach for resolution. So managers must be adaptable and act based on the conflict type. Thamhain (2004) argued that effective project leaders inspire their people and make everyone feel proud to be part of the organization and its mission; for clarity, purpose and personal as well as organizational goals must align for a unified team culture to emerge. Thamhain suggests that effective project managers encourage their people, show personal recognition for work achievements and make the detail of contributions highly visible to others within the organization. This is to show good encouragement and sustain people's commitment and team unity behind the organizational mission.

The study by Kadefors (2004) observes that building trust is an important people competency for project managers who need to build loyalty with team members such that both parties respect each other and what they represent. They need to show high level of caring and display this in an open and genuine way. Indications show that project managers are more likely to accomplish tasks if they have support and respect of team members by being polite and reasonable (Rosenau, 1998). In 1998, Rosenau suggested that effective project managers must be people-oriented with strong leadership and superb communication abilities. They must be flexible, creative, imaginative and adaptable to cope with the unexpected. Edmondson et al. (2005) considered that effective leaders create environments conducive to team learning. They argue that project managers need to be accessible, and ensure they appreciate other peoples' opinions. Wysocki (2007) suggests that effective project managers encourage

their team members to think '*outside the box*' and find innovative solutions to problems, and to make informed decision based on evidence from collected information.

To impart soft skills to managers and leaders, one of the theories used in the literature to explain the effective ways to impact soft skills is constructivist learning theory; whereby knowledge is constructed by learners as they try to make sense of their experiences based on their current and past knowledge. Donnelly et al. (2005) synthesizes from previous studies carried out by Perkins (1991), Piaget (1969), and Vygotsky (1978) that in constructivism, by interacting with the environment through conducting investigation, conversations or activities, individuals construct new knowledge by building on their current knowledge.

Another theory is the Vygotskian perspective of learning. Vygotsky and Wertsch (1985) theorized that learning occurs via social interaction that encourage individuals to deal with the kind of cognitive challenges just slightly above their current ability level. The theory further explains that concepts develop and understanding happens when learners enter into discussion and meaningful interaction with more capable peers or teachers. Those aforementioned theories were applied to project-based learning to find out to what extent project-based learning contributes to learners' acquisition in language and employability skills. Project based learning (PjBL) is a comprehensive instructional approach which engages students in an organized and cooperative manner to investigate and resolve certain problems. Moursund (2007) defined PjBL as a *soft skill* that involves an individual or group activity over a period of time, resulting in a product, presentation or performance. Moursund (2007) further elaborated that PjBL as cognitive skills that typically have a time-line and milestone, and other aspect of formative evaluation as the project proceeds. Whereas Buck Institute of Education (2007) stated that PjBL is a

systematic teaching method that engages students in learning through an extended inquiry process structured around complex, authentic questions and carefully designed products and tasks.

### **2.2.5 Soft Skills Contribution to Work Performance**

There have been widespread research studies of personal managerial skills of a project manager affecting performance of a project. Project success is also similar to work performance success. This segment of literature review will emphasize more on work performance in relation to the soft skills competencies in a person. In 1985, a study by Fryer examined factors of personal attributes affecting project success, and they are: *social skills, decision making skills, problem handling skills, opportunities recognizing skills* and *management of changes* as personal attributes affecting project success. Despite this, a project may still suffer performance problems. An understanding of project success factors and attributes of project managers alone proved to be insufficient for project success.

Lack of understanding exists regarding the importance of a conducive working environment and its impact on project success. Working environment refers to the perception of the work environment and can differ from project to project (Fryer, 1985). Few studies have been done to specifically examine how the working environment can affect managerial effectiveness. Opinions differ widely on the definition of “*performance of project managers*”. Project management competencies represent only one of the many criteria upon which manager performance depends. Contrary to the views espoused by Cooke-Davies (2002), it is arguably the most significant as it is people formulating the processes and systems who deliver the projects. Traditionally,

project success hinges on project manager performance, with emphasis on achieving time, cost and quality targets. It was often argued that these measures were too simplistic to use for assessing managerial performance in the context of today's industry. In today's society, many other factors come into play. Project success is a core concept of project management to a project manager, but its definition appears elusive.

The traditional definition of project success, which revolves around *time, cost and quality* proved to be inadequate. In recent years, more comprehensive definitions have been coined. For instance, definition of project success such as meeting the technical performance specifications and/or mission to be performed; there is a high level of satisfaction concerning the project outcome among key people and key users or project clientele (Guru, 2008). These definitions were more concerned with satisfying the various project stakeholders on the technical aspects of project success. Other aspects, such as cost and quality were not mentioned in the definition. It could be that a standardized definition of project success does not exist nor an accepted methodology of measuring it. Furthermore, Guru (2008) and Freeman and Beale (1992) emphasized that success means different things to each individual. An architect may consider success in terms of aesthetic appearance, an engineer in terms of technical competence, an accountant in terms of dollars spent under budget, a human resource manager in terms of employee satisfaction, among others. However, Wateridge (1998) noted that very few in the past have seriously considered project success criteria. The importance of the concept of project success was reflected by the Project Management Institute (PMI) devoting its 1986 Annual Seminar and Symposium to this topic. Defining project success appears difficult (Pheng & Chuan, 2006) since it is frequently discussed but rarely agreed upon. Liu and Walker (1998) explained that the concept can mean



different things to so many different people because of varying perceptions, and leads to disagreement about whether a project is successful or not.

Chan and Sidwell (2001) and Lim and Mohamed (1999) noted that the expectation on project outcome and perception of project success or failure will be different for everyone. They classified the perspective of project success into two (2) categories: *the macro and micro viewpoints*. According to them, the *macro viewpoint* of project success will address the question, “*Is the original project concept achieved?*” The *micro viewpoint* of project success will deal with project achievements in smaller component levels. It is usually referred to at the conclusion of the project construction phase by the parties involved in the construction. The authors noted that the concepts of macro and micro viewpoints of project success are likened to that of the forest and the trees. Are we looking at the forest? or are we looking at the trees? The completion criteria and satisfaction criteria are two common sets of conditions for determining project success. The two criteria are in turn influenced by different sets of factors respectively. Generally, the owners, users, stakeholders and at large the general public are the group of people who will look at project success from the macro viewpoint. On the other hand, the developer, a non-operator, and the contractor are the group of people who will look at project success from the micro viewpoint.

Identifying project success factors can help in analyzing the reasons for project success and failure. Since the 1960s, many studies have covered project success factors. The success and failure factors were first introduced by Rubin and Seeling (1999). They investigated the impact of project manager experience on project success and failure and concluded that a project manager’s previous experience has minimal impact on the project performance, whereas the size of the previously managed project does affect the

manager performance. Coolman (2015) and Avots (1969) identified reasons for project failure and concluded that the wrong choice of project manager, unplanned project termination and unsupportive top management were the main reasons for project failure.

Zarina Alias et al. (2014) and Hayfield (1979) examined different aspects leading to successful outcome projects; the determinants of successful projects are the macro and micro factors. The *macro factors* include realistic and thorough definition of the project, efficient project execution, understanding the project environment and selecting organizations for realizing the project. The *micro factors* include formulation of sound project policies, clear and simple project organization, selection of key personnel, efficient and dynamic management controls and reliable management information systems. In 1985, Might and Fischer investigated structural factors influencing project success. These factors include the organizational structure, level of authority delegated to the project manager and the project size. They found a weak relationship between organizational structure and project success and no relationship between project size and success. Delegation of authority was found to be positively related to all internal measures of success. Projects failed because of improper managerial principles, such as improper focus of the management system, by rewarding the wrong actions and the lack of communication of goals among others (Hughes, 1986).

Chan and Zailani (2007) and Pinto and Slevin (1988) reported that critical success of a project depends on ten (10) factors. These are project mission, top management support, project schedules, client consultation, personnel recruitment, technical tasks, client acceptance, monitoring and feedback, communication and trouble-shooting. Anton (1998), [however](#), listed six (6) factors for enhanced project success, namely: planning effort in design and construction, project manager goal commitment, project team

motivation, project manager technical capabilities, scope and work definition and control system. Belassi and Tukel (1996) categorized success factors into four (4) main groups: factors relating to the *project managers*, factors relating to the *project*, factors relating to the *organization* and factors relating to the *external environment*. Based on the review of literature, it is therefore clear that various researchers have all mentioned that human (soft skills) factors played an important role in determining the success of a project or work performance.

In contrast, Anastasios (2007) argues that project success criteria are a set of principles by which a project could be assessed. According to Anastasios these are basic criteria of cost, time and quality (C.T.Q) and they are also called the golden triangle of project success criteria. However, the earlier mentioned three (3) criteria have been criticized as being inadequate. For instance, taking a project completion time; because of delays, project managers occasionally pay penalties that increase the total project cost. Notwithstanding such projects are still pronounced as successful. Another example is linked with customer acceptance. A project may be delivered and implemented on time, within cost and to some standard quality as requested, but if it is unused by customers, disliked by the sponsors and does not make significant contribution to organizational effectiveness it is clearly not a successful project.

As with other literature being reviewed in previous sections, the above extant literature also do not consider the relationships of soft skills (SS) acquired from attending the SS program using '*time space learning*' – training methodology (TM), conducted or delivered by a trainer to assess its effectiveness (i.e., trainer's effectiveness (TE)) and the effect of the acquired soft skills on work performance (WP) which are of concern to

the present study. In line with the focus of the present study, the following hypothesis was proposed:

**Hypothesis-1:** *Soft skills (SS) acquisitions directly influence employee work performance (WP).*

### 2.3 TRAINING METHODOLOGY (TM)

Extant literature on training has been focusing mainly on trainees and the workplace, including topics such as *trainee's characteristics* (Naquin & Holton, 2002; Tracey et al., 2001), *training motivation* (Wiethoff, 2004), and *work environment* (Richman-Hirsch, 2001; Tracey et al., 2001), and *training effectiveness* (Abdullah & Mohd Yazam, 2008; Dayang Nailul et al., 2011; Mohd Rafi Yaacob et al., 2016; Noor Aznida et al., 2015; Shirley Ken et al., 2012; Vimala, 2011).

Management training and development have also increased greatly in the last decades. Recently, the focus has shifted from training output to process models – why certain training has an effect and how it can be optimized (Holton et al., 2000). Thus, it will be beneficial to review a selection of relevant training and development methods, which are or have been used by organizations and industries. These training methods include a wide range of forms -- *from classroom to outdoor activities* -- and are implemented in business simulations, role plays, and case studies. For instance, training can be designated based on different delivery location of an industry (Jacobs, 2003), thus, off-the job training or on-the-job training are recommended in this kind of situation. According to Jacobs (2003), and Noe et al. (2002), both off-site classroom training and on-the-job training are the most frequently used training practices and have consistently been used by training industries for many different jobs as both types of training

enhance human capital development. However, Jacobs (2003), and Noe et al. (2002) did not consider '*time space learning*' training methodology and other studies as reviewed before only focused on other training methodologies while '*time space learning*' which is pertinent to the present study was not given attention.

### **2.3.1 Learning Theories**

Several learning theories tried to explain how people learn and to explicate different aspects of their learning processes. Learning theories in the literature include *reinforcement theory*, *goal setting theory*, *social learning theory*, *adult learning theory*, *needs theories*, *expectancy theory*, *action or experiential learning theory* and so on (George & Jones, 1999; Wagner & Hollenbeck, 2005). Each learning theory explains the learning process from a different perspective. According to behaviorism, for instance, learning is a process by which behavior changes as a result of experiences and is viewed as primarily externally induced. According to this concept, learning is most effective when systematically arranged to reinforce the desired response (Davis & Luthans, 1980; Van Wart, Cayer & Cook, 1993).

Literature review concerning adult learning showed that adults as learners have specific characteristics that set them apart from children. These characteristics vary from author to author. However, there seems to be a general consensus in the literature (Brookfield, 1986; Cross, 1981; Jarvis, 1995; Knowles, 1990, 1984; Rogers, 2002, 1996) on some common characteristics that have an impact on learning effectiveness and the overall classroom experience. Gonzalez (2008) summarized the various characteristics as follows:

- adults participate in the learning process with specific intents, goals and expectations;
- adults already have certain knowledge and experience as well as fixed perspectives;
- adults have already developed personal styles of learning;
- as adults, they are bound to self-directed activities throughout their lives; and
- adults may have to deal with certain obstacles in their learning process.

Similarly, the main requirements for effective adult learning have been defined and can be summarized as follows (Courau, 1994; Cross, 1981; Jaques, 2000; Noye & Piveteau, 1997; Rogers, 2002):

- education is centered on the adult learner;
- the active participation of the adult learners is both encouraged and intended;
- the creation of a learning environment based on communication, cooperation and mutual respect.

Adult learning theory combines various theories such as sociology, philosophy, social and psychology as well as influences from education and socio-culture theories. According to Merriam and Cafarella (1999), no specific theory explains the adult learning process. Adult learning theory can be divided into a few categories such as: *behaviorist, cognitivist, social, and humanistic*. Behaviorists hold that learning occurs when a connection exists between stimulus and response. Environmental factors are considered to foster learning. In contrast, in cognitive learning theory, learning is a relatively permanent change in behavior or in behavioral potentiality resulting from experience (Van Wart, Cayer, & Cook, 1993). This theory thus holds that learning is

partially externally induced and partially mediated by the opportunity to use what is being learned, social encouragement to use it, and the learner's ability to integrate and retrieve learning. As for cognitivists, they believe that learning is achieved through assimilation and accommodation. Assimilation happens when someone applies existing knowledge to a new event or problem.

Adult learning theory regards learning as a form of self-actualization, especially of the higher-level needs identified in Maslow's hierarchy of needs, which include the affective domain (feelings and hopes) (Van Wart et al., 1993). The major differences between adult learners and children are said to be motivation, experience, level of engagement, and application (Russell, 2006). In this perspective, the learners become central to the learning process. Social theorists noted that learning happens when people learn from others by observing, imitating and modeling while humanistic theory observed that emotions, feelings, personal quest and relationships have significant roles in any learning and intellectual development.

In this present study, cognitive learning theory is being utilized by the trainer as the trainees (who are working adults) were given opportunity to use what is being learned through assimilation. The present study also uses adult learning theory together with experiential and action learning in the soft skills program. Specifically, the training methodology (*'time space learning'*) being used gives a 'space break' for adults (cognitivist) to experiment or experience themselves in line with the adult learner characteristics way of learning as specified by Gonzalez (2008); Rogers (2002); and Jarvis (1995). Here, the trainer plays a major role (trainer's effectiveness variable) in not just presenting the knowledge from the materials used, but also to facilitate, give feedback and encouragement, coach the trainees or learners for improvement and

changes in their behavior, and motivating them to apply and practice what they had learned during the classroom training into their real workplace environment.

Learning style, according to Wan Chik Nurida Ismail and Norzaini Azmana (2010) is the manner in which students or learners consistently respond to and process information in a learning environment. Learning style will influence the setting where people choose to learn, what they want to learn about, and how they approach the learning situation (Conti & Welborn, 1986).

In contrast to cognitive learning theory, social learning theory (SLT) was proposed by Mischel, Mahoney, Meichenbaum, Staats, and Bandura (Davis & Luthans, 1980). Social learning theory stresses on *learning from other people in a social environment* (Davis & Luthans, 1980). From the SLT perspective, learning is a continuous, reciprocal interaction among cognitive, behavioral, and environmental determinants between people. In short, people and their environment are not totally independent units but instead interact in a reciprocal way. According to Davis and Luthans (1980), people produce the environmental conditions that affect their behavior in a reciprocal fashion. Experiences generated by behavior also partly determine what a person becomes and can do, which, in turn, affects subsequent behavior. In other words, SLT suggests that most people learn behaviors by observing others and then modeling the behaviors perceived as effective. Besides that, in SLT behavior that is reinforced or rewarded tends to be repeated (Noe, 1999). Bandura (1977) suggested that any attempt to understand how people learn must take into account the impact on learning not only of reinforcement (either positive or negative) and punishment, but also of feelings and thoughts; in other words, cognitive processes (Bandura, 1977; George & Jones, 1999).



According to George and Jones (1999) cognitive processes are the various thought processes of people. These processes relate to how people explain the causes of their own or other people's behavior and information they have received. In general, people attribute someone's behavior to internal and external causes. An internal attribution assigns the cause of the behavior to some characteristic of the person performing the behavior and assigns credit or blame to the individual actor. An external attribution assigns the cause of the behavior to factors outside the individual. When people form attributions, they are engaging in a cognitive process to determine why a person has performed a specific behavior (George & Jones, 1999). In addition to stressing the importance of cognitive processes, social learning theory also suggests that learning can take place vicariously through observation of how others behave (George & Jones, 1999). In other words, while SLT agrees with the view that learning can occur as a result of directly experienced response consequences, it also emphasizes that learning can take place vicariously through observing and then reproducing the observed behavior (Davis & Luthans, 1980). According to Bandura (1976, 1977), learning through observation of modeled behavior is regulated by such interrelated sub-processes as attention, retention, motor reproduction, and reinforcement.

Besides focusing on learning through observation and modeling, social learning theory proposed that people can reinforce or punish their own behaviors by engaging in self-reinforcement or self-control (Wagner & Hollenbeck, 2005). According to Bandura (1977), self-reinforcing events occur when tangible rewards are readily available for the taking; when people deny themselves free access to those rewards; and when they allow themselves to acquire the rewards only after achieving difficult self-set goals. Social learning theory also states that learning is influenced by a person's self-efficacy – *a person's belief about his or her ability to perform a particular behavior successfully.*

Self-efficacy has influences learning in three ways. First, it influences the activities and goals that individual choose for themselves. Second, it affects learning by influencing the effort that individuals exert on the task. Finally, it affects the persistence with which a person tries to master new or sometimes difficult tasks (George & Jones, 1999).

In this present study, social learning theory too was being utilized as adults or trainees were asked to meet back in the subsequent sessions after the ‘space break’ of approximately 3 to 4 weeks. The first module of each subsequent meeting session after the ‘space break’ was to review what they had learned in the previous session. During the review, the trainees reflect on what they had applied and practiced (i.e., cognitive learning theory) in their real workplace environment; and then they prepare to report or share with the whole class members on their individual experiences. While listening to each class member’s stories or experiences; observing the trainer facilitation, feedback, encouragement and coaching the trainees for improvement and changes in their behavior; this is where the social learning theory holds whereby; “*people learn behaviors by observing others and then modeling the behaviors perceived as effective*”, and in addition, it recognizes that behavior that is reinforced and/or rewarded tends to be repeated by observers (Noe, 1999). That is why in this present study, in the soft skills training program, an ‘*outstanding performance award*’ in the form of a Parker Pen, is given to one class member in each sharing or reporting session to recognize efforts of putting into practice and applying what they had learned in the previous session. Similarly, the trainer plays a major role here (trainer’s effectiveness variable) in facilitating, giving feedback and encouragement and coaching the trainees. Since SLT also stated that it is influenced by a person’s self-efficacy in many ways, hence, individual commitment in the form of action-plan (or goal setting) is one of the ways

being incorporated within the training program besides the learners' persistence in mastering new and sometimes difficult skills and behavior change.

#### **2.3.1.1 Facilitated, Group and Individual Learning Method**

Facilitated learning method includes the more traditional, better-known methods such as training courses, outdoor learning, qualification programs, and the more creative dramatic interventions. They are methods delivered by a teacher, trainer or facilitator whose purpose is to enable a group to achieve pre-determined objectives or learning outcomes. The strengths of these methods are that they often quick, visible and high-volume solutions and as such are very popular with both organizations and individuals. The down side or weaknesses of these types of methods is that they are group focused and therefore do not necessarily meet individual learning requirements. Should these methods be removed from the workplace and without connection being made to the day-to-day work; it is sometimes difficult for learners to apply their learning, particularly if their line manager is unaware of the skills, knowledge or behaviors that they have been learning (Clifford & Thorpe, 2007). As for the Malaysian context, in general, trainees are very responsive to this type of learning technique for as long it is relevant to the learning objectives and to their job, and the facilitator should remain in control. If the facilitator is not in control, the learning will be disruptive as learners will start to do their own individual non-productive activities.

In this present study, the trainer delivering the soft skills training program utilizes these facilitated learning methods to ensure the group achieve the pre-determined learning objectives or learning outcomes. In this aspect, the trainer's effectiveness (TE) variable will be explored in the present study.

Group learning method is the name given to group activities that do not have a facilitator or are not specifically set up as learning programs (Clifford & Thorpe, 2007); this method is also being used in implementing soft skills training programs. Examples of these methods are discussion boards and groups, networking events, professional institutes and/or trade exhibitions. In the present study, during the soft skills training program, many group discussions were being used to enable adult learners to achieve the most as these are some of the main requirements for effective adult learning – active participation and creating a learning environment based on communication, cooperation and mutual respect (Jaques, 2000; Noye & Piveteau, 1997; Rogers, 2002). In the Malaysian context, these group learning techniques are also very much applicable and needed as they conform to adult learning theory, whereby adults like to participate in the learning process (Gonzalez, 2008). This is where some trainers violate adult learning theory, by over asserting a point and not welcoming disagreement or criticism from trainees, which leads to trainees losing interest in the learning. All these group learning methods bring together individuals who have a specific common interest and are therefore an opportunity to share ideas, discussions, current thinking and raise awareness of best practice. On personal development plans we often see these methods not included because they are not always viewed as learning experiences; however, we strongly believe that much can be gained by considering these different methods as part of the overall learning and development process.

As for individual learning methods, these include *mentoring, coaching, executive coaching, distance learning, e-learning, self-study* and *reflective practice*. These methods can be customized to fit individual needs and can be delivered at a time and place convenient for the learners. Some methods -- such as distance learning and e-learning -- demand learner self-motivation in achieving the learning outcomes; in

others, the learning occurs by working on a one-to-one basis with a coach or mentor. Using alternatives to training courses can save money because such methods rely on existing internal resources, and can be adapted to existing deadlines and workloads. Since needs are met more completely, return on investment is higher and achieved faster (Clifford & Thorpe, 2007).

Likewise, in the present study soft skills training program for the learners or trainees incorporate coaching as an individual learning method whereby each trainee is being coached by the trainer especially on the individual activities such as role-play, sharing and presenting their ideas and experiences. In the Malaysian context, like elsewhere too, individuals like to be assisted when facing some difficulties or learning new things. If the trainer had gained the trust from the learners, and had built some credibility, the trainees will be very receptive to this type of one-to-one coaching, feedback and comments for improvement. However, we will see resistance from trainees if they do not trust the trainer or the trainer has some credibility issues.

### **2.3.2 Training Methodology versus Training Method**

Methodology can properly refer to the theoretical analysis of the method appropriate to a field of study or to the body of methods and principles particularly to a branch of knowledge (Advanced Oxford Dictionary, 2010). Method, on the other hand, refers to the plans or procedures followed to accomplish a task or attain a goal. Method implies a detailed, logically ordered plan: *system suggests order, regularity, and coordination of methods*. A routine is a habitual, often tiresome method. Manner and fashion emphasize personal or distinctive behavior such as a clearly articulated manner of speaking, issuing order in an arbitrary and abrasive fashion (Advanced Oxford Dictionary, 2010).

According to Mandakini (2002), training methodology include the methods, materials, techniques and resources used to implement the workshop and transfer new knowledge, skills, and attitudes to participants. Training methodology for work-related job comes in a variety of forms, ranging from formal, scheduled classroom instruction to spur-of-the-moment sessions with a co-worker to self-based trial and error efforts (James & Dunkle, 2005). In a simplified form, methodology is the theory or study of methods while method is the approach used to do something. However, training method and methodology are synonymous and are often used interchangeably in training literature.

The present research study will use the term 'training methodology' as one of the variables used in the present study representing '*time space learning*' as earlier enunciated. Both organization and individual workers make choices regarding the selection of training methods. In this literature review, the study explains the modes of training being utilized by employees. I also analyze the linkages between these various training modes and the organizational, technical and individual characteristics associated with each employee. Training method can be categorized into a number of dimensions. Two important dimensions are the degree of interaction with other participants during training (which we term personal versus interpersonal), and the degree of formality of the training (James & Dunkle, 2005).

Furthermore, a training method is the process, technique or approach which a trainer uses in teaching. Some examples of training methods are: *demonstration by the trainer with observation and imitation by the trainee; discussion and debate; discussion groups; lecture presentation; problem solving and experimentation, role-playing; research; singing, games, electronic media such as TV, video, and film, and so forth* (James & Dunkle, 2005). Some of these training methodologies and/or training methods

discussed are being adopted and adapted in the present study, during delivery of the soft skills training program to enhance soft skills acquisition by the trainees in enhancing their work performance.

### **2.3.3 On-The-Job Training (OJT)**

Literature has also shown that a considerable amount of learning occurs as a result of training conducted in the work setting itself, also known as on-the-job training or OJT (Jacobs, 2003). Organizations use OJT for training newly hired employees, upgrading experienced employees' skills when new technology is introduced, cross-training employees within a department or work unit, and orienting transferred or promoted employees to their new jobs (Jacobs, 2003; Noe et al., 2002). According to Clifford and Thorpe (2007), OJT is known universally as "*sitting next to Nelly*" and it included other activities such as apprenticeship, delegation, coaching and acting position. Many learning activities take place within the workplace, giving it high relevance and validity to the individual. OJT learning is cost-effective and can be delivered at appropriate times to meet individual and business requirements. However, it can often be unstructured and unplanned which means that specific learning outcomes may not be defined and are therefore difficult to achieve.

Jacobs (2003) described OJT as a training process in which one person, most often the supervisor or lead person of a work area, passes job knowledge and skills to another person. In other words, the term refers to a process through which new or inexperienced employees learn by observing experienced peers or managers performing the job and trying to imitate their behavior (Clements & Josiam, 1995; Noe, 1999). According to the

literature, OJT includes the following Allen's four (4) steps – *Show, Tell, Do, Check*, (Rothwell & Kazanas, 1990):

Step 1: Preparation - **Show**: demonstrate to learners what they should do;

Step 2: Preparation - **Tell**: explain to learners what they should do and why they should do it;

Step 3: Application - **Do**: allow learners to try out the work;

Step 4: Inspection - **Check**: follow up with learners, providing praise for what they do right, and specific feedback on what they should do to improve.

During World War II, Allen's four (4) step formula was expanded to seven (7) steps, which are now considered classic (Jacobs, 2003; Rothwell & Kazanas, 1990) as they have remained essentially unchanged since World War II. These seven (7) steps are (Jacobs, 2003):

1. Show the worker how to perform the task;
2. Explain the key points;
3. Let the worker watch the instructor do it again;
4. Let the worker do the simple parts of the job;
5. Let the worker perform the whole job;
6. Let the worker perform the whole job – but watch him or her;
7. Let the worker perform on his/her own.



### 2.3.3.1 Evaluation of the OJT Approach

Since OJT is a popular training method and widely used by organizations, many scholars have evaluated its effectiveness and efficiency. According to their studies, the frequent use of OJT is based on three (3) incentives: (a) the favorable relationships between training costs and benefits; (b) the possibility to train just-in-time; and (c) the expectation of positive transfer of what was learned to the employee's own work situation (Van Zolingen et al., 2000). Furthermore, OJT requires less investment in time or money for materials, fees, and instructional design since the employees learn the required job knowledge and skills through managers or peers directly (Jacobs & Osman-Gani, 1999; Wilson et al., 1980).

Despite its many advantages, OJT has several drawbacks. A major weakness of OJT is that it is usually carried out in an *unstructured form* (De Jong, 1996; Jacobs, 2003; Kainen, Begley & Maggard, 1983; Noe, 1999; Wilson et al., 1980). With such an unstructured form, trainees often receive insufficient advance information about the tasks to be learned because of the absence of coordination between the different stages of the training process. Moreover, unstructured on-the-job training (U-OJT) can result in poorly trained employees or employees who use ineffective or dangerous methods to produce a product or provide a service (Noe, 1999). In addition, U-OJT leads to a slower transfer process (Van Zolingen et al., 2000). The effectiveness of OJT in terms of cost and benefits has also been investigated (Jacobs, 2003; Van Zolingen et al., 2000). Studies show that OJT does not always produce favorable results, and that it characteristically has a number of problems that can cause ineffectiveness, which are summarized as follows (Jacobs, 2003):

- The training content is often inaccurate or incomplete;
- Experienced employees are seldom able to communicate effectively when they conduct the training;
- Experienced employees use different methods each time they conduct the training, and not all the methods they use are equally effective;
- Employees are often unsure about whether they are allowed to train others or not;
- Many employees fear that sharing their knowledge and skills will reduce their own status as experts and possibly even threaten their job security.

#### **2.3.3.2 Structured and Unstructured On-The-Job Training (S-OJT/U-OJT)**

Structured training is a kind of training that has a high degree of planning. In other words, structured training can be described as the training of a new worker through a systematically developed educational program. Such a description suggests the utilization of a systems approach to develop a training program in which the training outcomes are specified at the beginning of the training and the training methods used to achieve the outcomes are specified after the desired outcomes have been determined (Jacobs, 2003).

In contrast, unstructured on-the-job training (U-OJT) takes place when no purposeful instructional plan is used in training a new worker. On the other hand, unplanned or unstructured training is characterized by a lack of concern about the methods used for learning and the outcomes of the learning (Jacobs, 2003; Wilson et al., 1980). Therefore, the interaction between the various dimensions – *degree of planning, location of the training and learning, delivery time or manner, presence or absence of a*

*facilitator and group or individual oriented* – provide a framework for understanding different training approaches.

According to Jacobs (1992), S-OJT is “*the one-to-one process of providing the knowledge and skills to perform a specific task within a job.*” Jacobs distinguished S-OJT as a form of training that occurs in the actual workplace; makes use of training objectives and plans; requires the active involvement of a trainer; uses printed materials and job guides; and employs a systematic approach (Jacobs, 1992). In a later publication, he redefined S-OJT as “*the planned process of developing competence on units of work by having an experienced employee train a novice employee at the work setting, or a location that closely resembles the work settings*” (Jacobs, 2003).

Several studies have investigated the benefits and strengths of S-OJT by comparing this approach with other training approaches. For example, Jacobs and McGiffin (1987) conducted a field study in a large company that processes and packages a wide range of edible oils. Their attention was focused on the job title - Lab Tech III, which represented entry-level salaried employees. At the beginning of the study, these employees received an average of 12 weeks of U-OJT given by their supervisors. During their field work, Jacobs and McGiffin introduced three (3) changes in the company's practices:

- (1) the supervisors were trained in S-OJT;
- (2) the job of Lab Tech III was analyzed and the results of the analysis were written up as a training manual suitable for self-instruction on the job; and
- (3) checklist (job aids) were developed to help workers carry out their tasks and assess their own performance and progress.

From the study, the results showed that S-OJT made it possible to reduce the training time for new lab technicians from twelve (12) weeks to three (3) weeks. In other words, the difference between the two approaches, U-OJT versus S-OJT, in the time required to reach a standard performance was determined to be reduced by approximately nine (9) weeks or 75 per cent. In addition, the annualized savings in wages and benefits of using the S-OJT approach was about US\$10,000 in the first year.

Jacobs, Jones, and Neil (1992) compared the forecasted benefits of unstructured and structured forms of on-the-job training across three (3) task settings in a manufacturing company. They reported that S-OJT provided approximately twice the benefits of U-OJT in terms of the value of employees' performance outcomes and, furthermore, had five (5) times the efficiency compared to unstructured OJT in terms of the time required to achieve the training objectives. It has been claimed that S-OJT has greater efficiency and greater influence on work quality than U-OJT (Jacobs, 1994). In other words, when new employees learned certain tasks through S-OJT, the quality of their work was higher than when they learned the tasks through U-OJT. The cost of reworking was reduced by at least two-thirds when employees learned tasks through S-OJT. In short, it can be concluded that structured on-the-job training (S-OJT) is superior to unstructured on-the-job training (U-OJT) and that its benefits include reduced overall learning time, reduced overall training costs, higher transfer rate, heightened new-worker job confidence, high learning success on job task tests, and a positive organizational climate due to healthy interactions among workers (Jacobs, 2003).

In relation to this present study, the design of the soft skills training program incorporated the usage of S-OJT, whereby the trainees had to develop their own individual actions plan in each session meeting upon finishing the learning objectives of

respective modules. From these actions plan, the trainees or learners have to go back to their workplace environment and carry out their action plan commitment by applying and practicing what they had learned in their day to day job or real workplace consciously; be it new skills to hone or a new way of behaving for positive behavior changes.

#### **2.3.4 Off-The-Job Training / Classroom Training**

It has been estimated that more than US\$30 billion was spent for off-the-job or classroom training programs every year (Jacobs, 2003; Noe, 1999). Literature review has shown that the number of organizations using formal classroom training has increased dramatically in the past thirty (30) years. According to Jacobs (2003), classroom training is off-the-job training which provides group-based learning opportunities on a variety of topics at a site other than the location of the actual work done. Yelon (1999) mentioned three (3) distinguishable attributes of classroom instruction. First, classroom training requires a live instructor or trainer to deliver the training. Second, classroom instruction involves teaching a group of trainees. Third, it requires the physical separation of the classroom from the workplace. Yelon (1999) also stated that the purpose of classroom instruction is to teach workers the knowledge required to perform the job. In other words, classroom training is a *planned training method* with formal presentation to a group of trainees, which occurs at a location designed to make learning happen rather than the actual job setting. Lecture or classroom approach has been described as the most frequently used training method in classroom training (Noe, 1999). Most often, the trainer communicates through spoken words what he or she would like the trainees to learn, and the trainees are usually passive, sitting in a classroom listening and taking notes to receive the training content.

As a result, trainees rarely have opportunities to practice the tasks learned in the training and seldom receive much feedback from the trainer, which can reduce the classroom training effectiveness (Noe, 1999; Rothwell, 1998).

In order to increase training effectiveness and overcome such problems the lecture is often supplemented with question-and-answer periods, discussion, or case studies. Besides that, for this type of training, the instruction is only one segment of a comprehensive instructional approach to performance change. The other two segments are an introduction and a conclusion to the training. Together, these three (3) segments contain eight (8) elements designed to promote retention and transfer (Yelon, 1999):

1. Motivation to learn the performance,
2. Orientation to establish mental readiness to learn,
3. Acquisition of knowledge,
4. Successful application of knowledge through practice,
5. Continuous improvement through feedback and revision,
6. Integration of each task performance with others learned,
7. Motivation to use the performance,
8. Evaluation of job readiness.

#### **2.3.4.1 Spaced Learning, Massed Learning, Action and Experiential Learning**

The significance of the “spacing effect”, first discovered over a century ago, describes the observation that humans and animals are able to remember things more effectively if learning is distributed over a long period rather than performed all at once (McDaniel, Fadler, & Pashler, 2013). *“The spacing effect is one of the oldest and best documented*

*phenomena in the history of learning and memory research*”, said Bahrick and Hall (2005). The study by Brown (2005) defines learning spaces as “spaces” that encompass the full range of places in which learning occurs, from real to virtual, from classroom to chat room. Nevertheless, at this point, no single definition captures all the nuances or degrees of technology impacted learning spaces. This effect is believed to be closely connected to the process of memory consolidation, whereby short-term memories are transformed into long-term ones, yet the underlying neural mechanism involved has long remained unclear. The formation of a memory is highly sensitive not only to the total amount of training, but also to the pattern of trials used during training (Farah et al., 2009), particularly trials distributed over time (*i.e. time space learning*). Trials distributed over time are superior at generating long-term memories than trials presented at very short intervals (*i.e. massed learning*) in every organism in which this has been studied (Sutton et al., 2002).

In contrast, Serrat (2008) focused on action learning (*an educational process by which a person studies his/her own action and experience to improve performance*) and argued that it is most effective when the commitment is voluntary. The author maintains that it also focuses on real-life, practice problems that are open-ended and do not have a right or wrong answer. Accordingly, the most common applications of action learning are in professional and managerial learning and development. In action learning programs, managers and trainers focus on actual organizational challenges and learn how to solve them more effectively (Serrat, 2008).

Rogers (2002) asserted that the effectiveness to training transfer could be attributed to the learning style embedded in the training methods. Kolb (1984) described one of those learning styles as experiential learning or “*the process whereby knowledge is created*

*through the transformation of experience*”. In this learning style, active learner participation, and the given opportunity to experiment what had been learned, will have an impact on the learning effectiveness in changing the learners’ old habits to new desired habits (Brookfield, 1986; Jarvis, 1995; Rogers, 2002). This is where the ‘*time space learning*’ - training methodology that the researcher wanted to explore could impact on the soft skills acquisition of the learners as they were given ‘*space break*’ to experiment what they had learned as opposed to massed learning (straight consecutive days learning style). This experiential learning theory style is further supported by Kolb’s four (4) stage model of experiential learning whereby his stage-4 “*active experimentation*” will create new experiences for the learners (Kolb et al., 2001). In addition, this learning theory style is further supported by Sutton et al. (2002), who asserted that spaced learning is superior to massed learning; however, the aforementioned studies discussed did not focus on ‘*time space learning*’.

Various studies had discovered that spacing learning over time helps people learn more quickly and remember better and it has been found to be very effective in various areas, from sales training to language learning to medicine (Castel, Logan, Haber, & Viehman, 2012). In practice, this mean that a training or learning program with ‘*spaced learning*’ in mind will educate the learners with a concept or some learning objectives and then allow a period of time for them to experiment it, that is, similar to learning by doing (Kolb, 2001). Then the trainees or learners come back with reinforcement on the previous learning, and perhaps to share their positive experiences with encouragement by the trainer to continue applying and practicing those new concepts, and then continue with the subsequent learning objectives. This might involve a few or many repetitions, depending on how complex and detailed the content.



Thalheimer (2006) asserted that *“the spacing effect is one of the most reliable findings in the learning research, but it is, unfortunately, one of the least utilized learning methods in the workplace learning field”*. Spaced learning repetition deserves attention since there is much research literature supporting its use. Thalheimer (2006) study findings are highlighted in the report as follows:

1. A well-designed repetition could be very effective in supporting the learning;
2. Spaced learning repetitions are more effective than non-spaced repetitions;
3. Both teaching the learning material and practice/apply in every opportunity will produce benefits via spaced repetitions;
4. For long-term retention, spacing is particularly beneficial since spacing helps minimize forgetting;
5. Longer time spacing are generally more effective than shorter time spacing, although too long can be counterproductive;
6. Spaced learning repetitions over time generates better remembering in the future (after the learning events);
7. Gradually expanding the time spacing, although beneficial, does not outperform consistent spacing intervals;
8. Learning takes place over time and real learning does not usually occur in one-time events.

The spacing effect is likely to provide additional benefits besides long-term memory retrieval such as making ideas more persuasive and products more desirable. Training often involves some form of persuasion if not motivating and inspiring. Our focus is to get the trainees or learners to change their behavior on the job and these involve changing long-term habits, long-held beliefs, or lifelong values. For sure, one-time

training immersions just will not do it when we need to ask so much of our learners who have developed those habits for years.

Studies show that spacing repetitions over time facilitates long-term remembering because it helps the trainees or learners to store information in their memory in a way that makes the information more resistant to forgetting than massed learning or non-spaced repetitions. Dellarosa and Bourne (1985) in their study revealed that repetitions are better than single presentations of learning material, spaced repetitions are better than non-spaced repetitions, and longer time-spaced repetitions are better than shorter time-spaced repetitions. The results will vary depending upon the trainees or learners, the learning materials, and many other factors as well. We also need to be careful of the “the cramming effect”. If we force all the learning into a short time frame, we can do well when we have to retrieve information soon after learning, but we tend to quickly forget what we learned after a while.

In contrast, Thalheimer (2006) also mentioned that spaced learning does not always improve performance. It has its own weaknesses too. Massed repetitions could be better when the performance situation is imminent. Some research has not found the expected results of the spacing effects. For example, Toppino and Gracen (1985) presented learners with lists of words with differing numbers of intervening items and some using the same learning materials that Glenberg (1977) used in research to demonstrate the spacing effects; Toppino and Gracen (1985) found no evidence of the spacing effect. Likewise, Kahana and Greene (1993) also found no spacing effect when lists contained only words that had high ‘inter-stimulus semantic similarity’. Having said that, we can see that these experiments were more on lingual aspects; however, the present study will

focus on skills and behavior change of the trainees that impact on work performance after acquisition of soft skills from the training program.

To summarize, spacing helps learners remember over relatively longer time frames. The benefits of spacing can also be considered from another perspective (i.e., spacing repetitions over time reduces the number of repetitions needed to produce the same level of learning results; based on the author study, it was reduced by half). The extent to which trainees have sufficient time and resources available determine the extent to which training content will be used or constrained on the job (Noe, 1999; Russ-Eft, 2002). These opportunities to use training on the job have been defined as “*the extent to which a trainee is provided with or actively obtains work experiences relevant to the tasks for which he or she was trained*” (Ford et al., 1992). Training methods have been reported to have significant impact on transfer of both hard and soft skills (Arthur, 1996). According to Kauffeld and Lehmann-Willenbrock (2010), “*spaced training*” was superior to “*massed training*” regarding *transfer quality*, *self-reported sales competence*, and *organizational outcomes*. The synergy effect of the experiential learning model and spaced learning will be very interesting and might give a remarkable and successful transfer and this is what the present study respondents have gone through in the soft skills training program. However current literature about spaced learning is built on education and architectural embodiments of educational philosophies (Monahan, 2002). Although spaced learning has been in existence for some time, its application in Malaysian industry has been very minimal compared to other training methods. The 'space effect' of this approach on transfer of the acquired skills during training has not been critically articulated in the literature. The Farmer (2009) extensive synthesis of research on the impact of the environment on learning provides a starting point for learning space discussion.

In contrast, the problem with ‘massed learning’ classroom training method, whereby the training or learning is done in straight consecutive days, is that it is difficult to transfer the acquired knowledge and skill from training back on the job, where people have tendency to revert to their former behavior patterns (Day, 2001). As mentioned earlier, selecting the training methodology is a step in the overall approach to developing training instruction or materials. Without an approach to designing training that is performance oriented rather than subject matter or knowledge oriented, the effectiveness of the method is insignificant.

Based on review of literature on training methodology done in Malaysia, the reviews had not shown any ‘*time space learning*’ or ‘spaced learning’ or ‘space effects’ being studied locally; instead most studies were on the other aspects of training methods. For example, Nur Shafini Mohd et al. (2016) studied workplace training (on-the-job and off-the-job training methodology) and its effect on employee job performance and not ‘*time space learning*’ per se. Thurasamy et al. (2012) studied e-training effectiveness in multinational companies in Malaysia and revealed key factors impacting e-training effectiveness such as motivation to learn, management support, and organization support which are significant factors; but they did not mention ‘time space learning’ either. Likewise, a study on online training effectiveness method by Nor Azilah et al. (2016) also shows the benefits of online training and recognized the critical factors influencing successful implementation. Training methodology such as coaching for example, was studied by Chin Wei Chong et al. (2016) on managerial coach readiness, which highlighted that effective communication is the influencing factor in coaching effectiveness. Similarly, Ling et al. (2014) studied a sample of 251 respondents on the influence of coaching communication towards self-efficacy of teaching in Malaysia education organizations and found that coaching communication significantly and

positively influenced teaching self-efficacy; while Geok Chew Gan et al. (2015) studied a 172-respondent sample and revealed that both rapport and commitment significantly influenced coaching effectiveness.

From the discussion, we can see the research gap between this present study and the previous studies in which the 'spacing effect' or '*time space learning*' of this training methodology approach has not been critically articulated in the literature. The 'spaced learning' or referred as '*time space learning*' – training methodology will be the favored variable of interest in this study. This present study is to also further investigate the impact of soft skills acquisition by the trainees after attending the soft skills training using the '*time space learning*' - training methodology and conducted by the trainer (trainer's effectiveness will be one of the favored variables too) toward the trainees' work performance.

As from the extant literature, none of the above studies in Malaysia considered the relationship between '*time space learning*' training methodology, soft skills acquisition and work performance. Hence, two (2) hypotheses can be proposed here:

**Hypothesis-2:** *Training Methodology (TM) has a positive impact on Soft Skills (SS) acquisitions.*

**Hypothesis-3:** *Soft Skills (SS) acquisitions mediate the relationship between Training Methodology (TM) and Work Performance (WP).*

## **2.4 TRAINER'S EFFECTIVENESS (TE)**

What makes an effective trainer? Does the trainer's effectiveness play an important role in ensuring the trainees or learners acquire the soft skills from the training program attended, and help in their work performance improvement? This is one of the central questions the study intends to answer. To do this, we need to consider certain key issues. Firstly, the term 'trainer' is a broad one and has been used to describe a variety of different, but related, roles. As each role is associated with distinct aims and goals we need to establish clearly what the different roles are. Secondly, in what sense are we using the term 'effectiveness'? In the broader managerial field, effectiveness has not gone un-debated. Evidence has shown that the conceptual nature of 'effectiveness' is well supported in the extant literature, whereby the term is used to signify the relationship between performance and task objectives, between achievement assessed against goals and purposes (Leduchowicz & Bennett, 1983).

In this present study, the emphasis will be on the first levels of Kirkpatrick's 4-levels approach to training evaluation focusing on the trainer effectiveness. The first level being 'reactions', which has been referred to as the degree of trainees' satisfaction with the training program (Kirkpatrick, 1975a, 1975b, 1975c, 1975d).

As far back as 1983, the term effectiveness, according to Leduchowicz and Bennett concerns the relationship between a set purpose, action to achieve the purpose and the results or consequences of the action. In essence there should be clear consideration for the purpose of training, the role of the trainer, what actions are appropriate and how we know if the objectives have been achieved. Literature review has also shown a clear-cut distinction between the factors influencing trainer effectiveness and the indicators of

trainer effectiveness (Leduchowicz & Bennett, 1983). The findings of the study showed that six (6) groups of factors can potentially influence trainer effectiveness and these accordingly are:

- Trainer role orientation and perception:
- Trainer competencies;
- Trainer characteristics and credibility;
- Trainer work behavior and style;
- Outcomes of trainer activity; and
- Organizational factors.

These six (6) groups of factors can potentially influence trainer effectiveness in delivering or conducting the soft skills training program, which could result in success or failure in soft skills acquisition by the trainees regardless of what kind of training methodology the trainer will be using (present study uses the '*time space learning*' training methodology). In the subsequent sections, we will discuss these factors in more detail. In short, failure to impart soft skills to trainees could mean that their work performance could remain the status quo or even worsen.

Lawson (2003) described effective trainers as those who:

- (1) research their topic and are well informed; learners perceive them as credible;
- (2) demonstrate respect for, and listen to, the learners. They call learners by name, if possible;
- (3) validate everyone's experiences and their right to their own perspective;

- (4) know that key learning can take place when people express different viewpoints and bring their own perspectives into the adult learning classroom;
- (5) are aware that their cultural background shapes their views and beliefs, just as learner perspectives are shaped by culture and life experiences;
- (6) recognize their own biases and act in a professional manner when their “hot buttons” are pushed;
- (7) encourage all learners to share their experiences and contribute to the group-learning process in their unique ways;
- (8) use humor, contrasts, metaphors and suspense. They keep their listeners interested and challenge their thinking.
- (9) vary their pitch, speaking rate, and volume. They avoid speaking in monotones.
- (10) body posture, gestures, and facial expressions are natural and meaningful, reinforcing their subject matter.
- (11) comfortable with conflict resolution and know how to facilitate an inclusive course or workshop, where everyone’s participation is encouraged.
- (12) read and interpret learners’ responses – *verbal and non-verbal* – and adapt training plans to meet their needs. They are “in charge” without being overly controlling.
- (13) are aware that they do not know all the answers. They recognize that as well as offering their audience new knowledge or perspectives, they can also learn from course participants.
- (14) understand that the topics addressed during training may have an emotional impact on learners. They are empathetic and understanding about learners’ emotional reactions.



- (15) encourage co-trainers and learners to give them feedback, both informally and through formal evaluation. When they receive negative feedback about their performance, they critically analyze this feedback instead of becoming defensive.

In relation to the present study, ideally, the list of points pertaining to trainer effectiveness by Lawson (2003) should be implemented by the identified trainer responsible for conducting the soft skills training program. Thus, implementing these points will influence effectiveness of the soft skills acquired by the trainees or learners, which in turn affects their work performance. It also relates to training methodology to be incorporated whereby the trainer's competencies in presenting, facilitating and executing the methodology will determine the success of the soft skills program. In short, even the most experienced trainers can still improve on their training skills or competencies. Effective trainers will always seek out opportunities to learn new skills, and use negative feedback or comments from others as an opportunity to improve.

#### **2.4.1 Trainer Role, Competencies, and Characteristics**

Trainer effectiveness is influenced by the trainer role, competencies, and characteristics (Leduchowicz & Bennett, 1983). To be effective, trainers must have a grasp of learning theories and principles, and knowledge of human behavior to enable them to plan the varied training appropriate for the trainees' expectations (Chung, 2013). The experiences of a trainer are also very important because the trainer will be able to share his or her valuable experiences while delivering the training program (Compeau, 2002).

According to Mumford (1971) role can be defined as the collection of *behaviors*, *attitudes* and *values* expected of a person occupying a given position in an organization or society. The trainer role can be referred to as the way the trainer sees his/her role and is sensitive and responsive to the role demands of the trainees and their organization. Trainers should see their role as to setting up a suitable course that will achieve the set training objectives. They research the subject matter and structures and develop it in preparation for presentation to a group of trainees or learners, with the goal of transferring knowledge, skills and attitudes (Mumford, 1971).

Mumford (1971) added that there are four (4) major variations in the trainer role: *adviser*, *exponent*, *diagnostician*, *manager*. As an *adviser*, the trainer may be involved in producing training schemes, courses and individual programs, recruiting apprentices at craft or technical level and for graduates, preparing development schemes, including appraisals, for supervisors and managers. As *exponent*, the trainer has a direct teaching function as an instructor with a limited role; and to analyze, write reports, devise schemes and courses, check progress and perform more directly in a formal training situation. As a *diagnostician*, the trainer looks for alternative definitions of the problem, and for other than training solutions. He or she may survey the whole range of activities in a firm, the total climate, rather than a particular individual or group. Lastly, as *manager* in training, he or she is occupied both by the training specialist and by the person to whom he or she reports. The trainer specifies the personnel needed, both in number and type, and devises methods of selection. In implementing this present study, the role of the trainer is mainly as an adviser and exponent with some diagnostician and manager role where applicable.

A competent trainer will highly likely yield an effective training outcome (Leduchowicz & Bennett, 1983). Weinert (2001) defined trainer competencies as, "*the individual skills and knowledge required by training specialists so that they can carry out their initial roles effectively and have a basis for developing their roles and their performance*". Competence enables a person, team, or organization to act and react when performing familiar or novel working tasks (Weinert, 2001). It is a more or less specialized system of abilities, proficiencies, or skills and it occurs when employees successfully cope with their specific job requirements (Fischer et al., 1993; Kozlowski et al., 1999). According to Leduchowicz and Bennett (1983), the competencies needed by a trainer are of two types: (i) competencies in dealing with people, and (ii) other training practitioner competencies. People skills competencies include being persistent, getting their cooperation, being confident, respectful, empathy, sense of humor, persuasive and flexibility in adapting to situations; while other training practitioner competencies include knowledge and experience, analytical skills, creative and design skills, administration skills, and management skills (Bavolek & Keene, 2005; Leduchowicz & Bennett, 1983). According to Lourenco et al. (2014), to attract trainees' attention in a training program, the following sessions need to be introduced: creativity enhancement, opportunity edification, and creative problem solving.

Besides the role and competencies needed for trainers to be more effective, trainers also must make themselves unique by being sensitive and responsive to trainee or learner needs, as well as being genuinely interested in the subject area. Other important desirable characteristics include: *patience, humor, confidence, neat appearance, toleration of ambiguity* and *credibility*. Another important characteristic is trainer expressiveness in delivering presentations. An expressive trainer who shows appropriate vocal intonations (volume, pitch, emphasis, and pauses) and is generally fluent through

sounding natural and normal in rate of speaking (pacing) (Abrami, Dickens, Perry, & Leventhal, 1980; Towler & Dipboye, 2001).

To summarize, with regard to the present study, if trainers execute their role accordingly and effectively, and possess the right competencies and positive values and characteristics, and further utilize an effective training methodology (*'time space learning'*), for example, they will greatly influence the outcome of the soft skills training program delivered. This in turn will be seen in the trainees' work performance enhancement which the present study will further explore and investigate.

#### **2.4.2 Trainer Work Behavior and Style**

In addition to the trainer's role, competencies and characteristics discussed earlier, there are two (2) types of indicators of trainer effectiveness, the *work behavior and style* adopted by the trainer and the *outcomes* of trainer activity (Leduchowicz & Bennett, 1983). Research also has shown that trainer effectiveness is largely determined by trainer abilities, work behavior and determination; and it is also influenced greatly by the workplace context; the organization can enhance or reduce trainer effectiveness. The major organizational factors determining trainer effectiveness, according to Leduchowicz and Bennett (1983), include: level of support for training (which may be intellectual or verbal support), the demand for training, managerial style and sophistication, expectations and reputation of the training function in the organization.

Since training effectiveness is important to an organization's investment, the greatest challenge faced by the Human Resource department is in identifying instructional or delivery methods that can expedite transfer of training. Although new forms of

instruction such as self-paced, online learning are emerging, the dominant form of instruction is still the traditional instructor-led classroom involving the lecture format (Industry Report, 2006). Training delivery became an important subject for the HRD (Human Resource Development) field because industry recognized that effective delivery was needed to train workers quickly and efficiently (Korte, 2006). Today, the lecture remains one of the most popular forms of instruction, yet it is often criticized. As Korte (2006) points out, the method itself might not be an issue because the lecture can be useful in imparting information and knowledge to learners. The issue might lie in poor execution. Davis and Davis (1998) suggested several ways to make lectures more effective for adult learners, such as increasing the learner's attention and linking new information to prior knowledge.

In addition to the trainer's effectiveness in performing his or her job responsibilities, another most pragmatic approach to determine the training (not trainer) effectiveness, is to fully understand the reason behind developing the training. In other words, the reason for developing and implementing training is a key factor in determining that a training course or program will be effective in addressing performance deficiencies. If the reason for training was not clearly identified prior to training development, it could lead to inappropriate training for correcting performance deficiency. Abdullah Lin et al. (2008) further assert that HR managers must outline the required training programs focus to the outcomes and also measure the training effectiveness. Abdullah Lin et al. (2008) also found training effectiveness influenced by the specificity of the learning objectives; and the way the training design is coordinated to match specific learner needs. Thus, establishing a valid need for training is the basis for determining training effectiveness. For this reason, training needs analysis must be done first before any training implementation; the training objectives must be clarified, and individual roles

and responsibilities have to be defined. If there is a valid need for training, and the training addresses that need, effectively implemented training will be proven by indicators that validate how the training fulfils the need for training and whether the desired results were achieved (Davis & Davis, 1998).

#### **2.4.3 Training Evaluation – The Kirkpatrick Model**

As we had discussed the trainer role, competencies, characteristics, work behavior and style to ensure training effectiveness in the earlier sections, we also need to understand how to evaluate the training program effectiveness which also include the trainer's effectiveness in delivering it. Furthermore, trainer's effectiveness (TE) is one of the variables in this present study that may influence the training program effectiveness.

Literature review revealed that many approaches have been developed for training evaluation. For instance, Noe (1986) proposed an integrated model of motivational influences on training effectiveness. Baldwin and Ford (1988) then built a model of training transfer. Based on Kirkpatrick's model, Holton (1996) produced an enhanced three-level training evaluation model. Later, Colquitt et al. (2000) developed an integrated model of training motivation based on a meta-analytic path analysis of related research in the last few decades. However, training evaluation is dominated by what most call 'The Kirkpatrick Model'. This model focuses on four (4) levels of evaluation: *Reactions, Learning, Behavior and Results* (Kirkpatrick, 1975a, 1975b, 1975c, 1975d). Kirkpatrick's model is widely known and widely accepted, even if it is rarely fully implemented. Kirkpatrick's measures are useful for evaluating training outcomes (Colquitt et al., 2000; Kraiger et al., 1993; Quinones & Ehrenstein, 1997), as they are simple, easy to understand and comprehensive.

The ultimate goals of a soft skills (as well as hard skills) training is to improve organizational performance. Thus, it is essential to measure the success of a training program in terms of training outcomes. According to Tannenbaum et al. (1991), training reactions can be represented by three main components: *expectation*, *desire*, and *perception*, and it implied trainee's satisfaction with or enjoyment of the program. Thus, trainees' reaction plays an important role in building interest and attention and enhancing motivation to transfer (Kirkpatrick, 1994). In essence, the reason for evaluating is to determine the effectiveness of a training program. According to Donald and James (1994), there are three (3) specific reasons for evaluating training programs:

- To justify the existence and budget of the training department by showing how it contributes to the organization's objectives and goals;
- To decide whether to continue or discontinue training programs;
- To gain information on how to improve future training programs.

#### **2.4.3.1 Kirkpatrick's 4-Levels of Evaluation**

Kirkpatrick introduced a four (4) level approach to training evaluation in 1959. He described his approach in a chapter titled 'Evaluation' in the three editions of the Training and Development Handbook (1987, 1976, and 1967). In these chapters, Kirkpatrick stated that the definition of evaluation would be the determination of the effectiveness of a training program (1987, p. 302). His four (4) levels have become commonly known in the training field and they are: (Kirkpatrick's Training and Development Handbook, 1967, 1976, 1987).

### **Level-1: Reactions**

Did they like it? How well did participants like the program or course? This is normally being done upon completion of the entire course. The first level of criteria, reactions, refers to the degree of trainees' satisfaction with the training program. In other words, reaction may best be defined as how well the trainees liked the training program. While this outcome is an important starting point for evaluating program outcomes, it is perhaps the least explored in existing studies, according to Powell et al. (2009). In this present study, I utilized Kirkpatrick's Level-1 evaluations focusing on the evaluation of the instrument trainer's effectiveness variable.

### **Level-2: Learning**

Did they learn it? What principles, facts, and techniques were learned? Normally to be done after course completion. The second level of criteria, learning, refers to the degree to which trainees acquire knowledge, skills, principles and facts during the training process. For this level-2 evaluation, the trainer utilizes activities during the training sessions in the form of classroom activities such as quizzes, presentations, and fun games -- *although it is not documented like an actual test or quiz or exam like in an academic learning environment* -- especially after coming back from their 'space breaks' of 3 to 4 weeks in the review segment as part of the '*time space learning*' - training methodology learning features.



### **Level-3: Application/Behavior or Transfer**

Did they transfer their learning into their job or workplace environment? What changes in job behavior resulted from the program? To be done before and after the training course. This also explores whether the trainees' on-the job behavior has changed because of the training program and the trainer's ability to deliver the program effectively. This third level of criteria, application/behavior, refers to the degree to which trainees transfer what they have learned to the job or workplace, and how much improvement or change of behavior occurs on the job as results. The instrument soft skills (SS) acquisition in this present study utilizes an improvisation of Kirkpatrick's level-3 evaluation, since the survey responses were captured after the training had finished only. This could be improved further by future researchers to include the evaluation at the beginning and end of the training program.

### **Level-4: Results**

Did it produce tangible business results? What were the tangible results of the program in terms of reduced cost, improved quality, improved quantity, and so forth? This is also to be done before and after the training course. The final level of criteria, results, refers to the business and financial performance achieved by trainees after the training (Gagne & Medsker, 1996; Noe, 1999). This is broadly conceived as the overall end results achieved and these results could take myriad forms including sales quotas met, cost reductions, increased employee retention or satisfaction, and any number of system outcomes. The present study does not utilize this level-4 evaluation, as it is not necessary for the scope of the study.

Reaction, learning and behavior are important, but if the training program and the trainer's approach (i.e., trainer's effectiveness (TE) variable used in this present study) do not produce measurable results, then they probably have not achieved their goal.

#### **2.4.4 Past Research on Trainer Effectiveness**

The literature review on Leduchowicz (1982) paper has been mainly concerned with looking at what has been written about the role of the trainer and the criteria that have been proposed for judging trainer effectiveness. Over ten (10) diverse classifications of the trainer role have been identified. These range from the simplest where the trainer role is seen to consist of just two (2) elements -- *training practitioner and training administrator* -- to the more complex where, for instance, the trainer is attributed four (4) major roles, namely *adviser, exponent, diagnostician* and *manager*. The more recent classifications have mainly been based on research work aimed at identifying the actual tasks performed by trainers or looked at social interaction and innovation (Leduchowicz, 1982). Clearly, in any consideration of the trainer role, thought needs to be given to the exact nature of the trainer's organization and its future development.

The literature review has concentrated on two (2) major factors – (i) the *power and influence* that the trainer has in the organization and how this affects his or her work behavior and issues concerned; with (ii) *personal competence*, especially the core competencies that a trainer must have to be able to succeed in the job (Leduchowicz & Bennett, 1983). It has been argued, for instance, that the trainer's position, power and influence within an organization is a result of three (3) factors: (i) *autonomy*; (ii) *access to power*; (iii) *desire to achieve objectives*. Ten (10) factors are mentioned as sources of potential power in organizations - *authority, centrality, pervasiveness, irreplaceability,*

*information, control over equipment and systems, expertise, immediacy, personality and credibility* (Leduchowicz & Bennett, 1983).

There appear to be as many ideas about what competencies a trainer requires as there are authors. In one case three (3) types of competencies were cited (Leduchowicz & Bennett, 1983): *practitioner competencies, leadership competencies* and *organizational change agent competencies*. Recently, more agreement has developed, based on the core competencies concept. Work in Canada, Britain and the USA has aimed to draw up a detailed list of the essential competencies that trainers require in their job, whatever their exact role (Leduchowicz & Bennett, 1983).

Past and recent studies done overseas with regard to training effectiveness showed that there is no consideration on the relationship of trainer's effectiveness towards soft skills acquisition from the training program utilizing '*time space learning*' – training methodology and work performance enhancement. For example, study done by Scott (2010) was on the relationship between work environmental factors on new trainers and the degree of transfer of learning and resulted in a significant relationship. In addition, Bavolek (2005) did research on characteristics and competencies of an effective trainer; whereas Lawson (2004) was on calmness and competency as the characteristics of effective trainers.

Likewise, the Radclif and Jenkins (2007) study was on trainer's role while the Oladele (1986) research was on change orientation trainers in a developing country. Gauld and Miller (2004) worked on qualifications and competencies of effective workplace trainers; they found that trainers with formal teaching qualifications and who have been in training positions for more than ten years were identified as effective trainers. Other

researchers such as Corfield et al. (1984), McAleer and McAleavy (1990), and Dorothy Carolle Yaw (2008) too investigated different aspects from this present study such as trainer consultancy role, trainer accreditation and trainer tools. The extant literature did not consider the relationship between trainer's effectiveness with the soft skills acquisition per se, and this clearly shows existence of a research gap between what has been studied and the intended present study.

On the other hand, from the extant literature reviewed on Malaysia researchers, it was discovered that studies done in Malaysia were on many varied aspects of training effectiveness (but not the trainer) which does not show any studies on the trainer's effectiveness relationship with soft skills acquisition from the training program conducted. Such studies include Muhammad Awais Bhatti and Sharan Kaur (2010) on the role of individual and training design factors on training transfer; and Mat Rashid et al. (2010) on the determinants of training effectiveness in Malaysian organizations. Likewise, the Raja Suzana et al. (2011) study focuses on the influence of training design on training transfer performance in higher education institutions in Malaysia.

A recent study by Mohd Rafi Yaacob et al. (2016) focused on perception toward factors that affect effectiveness of an entrepreneurship training program; the result suggested that entrepreneur orientation and trainer skills variables did not have a significant relationship with the training program effectiveness. Interestingly, this is contrary to what the literature had acknowledged on the importance of the trainer skills (i.e., combination of the role, competence, characteristics).

In Malaysia, past studies on training effectiveness focused on the trainer's effectiveness are scarce; most studies emphasized other aspects of training effectiveness, such as the

*role of the trainer* (Muhammad Awais et al., 2010); *the training design* (Abdullah Lin et al., 2008); *the influence of training design* (Raja Suzana et al., 2011); *characteristics and competencies of effective trainers* (Bavolek, 2005; Lawson, 2004; Stewart & Chris, 1992); and studies on the *training evaluations* (Junaidah Hashim, 2006; Rosmah Mohamed et al., 2012).

The review of literature on studies in Malaysia also does not show any empirical study had been done on quantifying how effective the trainer was and had contributed toward the trainees' soft skills acquisition specifically after trainees attended the soft skills program delivered by the trainer using the '*time space learning*' training methodology; and how effective the acquired soft skills had contributed to their work performance. This clearly shows that the research gap existed between the past and recent research.

In accord with this present study of soft skills acquisition by the trainees from the training program attended using '*time space learning*' - training methodology, and conducted or delivered by the trainer which subsequently affects their work performance, the following two (2) hypotheses were proposed:

**Hypothesis-4:** *Trainer's Effectiveness (TE) positively influences Soft Skills (SS) acquisition.*

**Hypothesis-5:** *Soft Skills (SS) acquisitions mediate the relationship between Trainer's Effectiveness (TE) and Work Performance (WP).*

## 2.5 WORK PERFORMANCE (WP)

Work performance has always been an important issue in any organization. Many organizations, as a result of the global competitive business environment, have made training programs and development a routine exercise in order to maintain high work performance (Neely, 1999). Notably, the overall effectiveness and productivity of an organization have always been attributed to high work performance as it has been regarded as a core concept. Thus, assessment and monitoring work performance contributed largely to an organizational outcome and success (Eccles, 1991). That is why organizations, at all times, need to develop a strong organizational work performance culture while also maintaining their goals and objectives.

Generally, developing a definition for work performance has been discussed earlier. Robinson and Larsen (1990) in explaining work performance defined it as “*the degree to which duties associated with the job are carried out*”. Harrison and Shaffer (2005) argued that work or job performance is a function of the amount of time and energy (effort) that employees devote to their job. However, individual behavior could not be only recognized as the main factor of the outcome aspects of job performance (Sonnentag & Frese, 2002). Basically, performance is regarded as a multidimensional and dynamic concept, despite the fact that relatively little effort had been spent on clarifying the concept and its dimension. According to Sonnentag and Frese (2002), researchers such as Campbell (1990), Campbell, McCloy, Oppler, and Sager (1993), Kanfer (1990) and Roe (1999) have tried to clarify the concept of performance in terms of behavioral aspects which refers to what an individual does in the work situation and the outcome aspect which refers to the consequences of the individual’s behavior.

In explaining the multidimensional and dynamic concept of performance, Borman and Motowidlo (1993) in Sonnentag and Frese (2002), distinguish between task and contextual performance. According to them, while task performance refers to individual proficiency in performing activities contributing to the organization's technical core, the contextual performance refers to activities not contributing to the technical core but which support the organizational, social, and psychological environment. In relation to task performance, United Engineers Malaysia (UEM Group, 2007), cited in Rahmah Ismail and Shahida Zainal Abidin (2010), defined individual ability based on several important criteria crucial in achieving the organization's goals and they are as follows: *planning and organizing, communication, analysis and problem solving, customer orientation focus, staff development, leadership, achievement orientation, decision making and working as a team*. Rahim et al. (2001) concludes that work performance is the combined mental and physical ability of a person to finish a task as required of the job.

Looking at the important role played by work performance in ensuring organizational success, many theories have been proposed. Blumberg and Pringle (1982) argue that the existing theories have failed to provide a strong and consistent prediction for work/job performance. This failure was due to neglecting an important dimension of performance. They therefore suggested three (3) basic dimensions of performance which is: *capacity to perform, willingness to perform and opportunity to perform*.

However, the most commonly accepted theories and model of work performance is that of Campbell and his colleagues (Campbell, 1990; Campbell, Gasser, & Oswald, 1996). In fact, to a greater extent their theoretical research on the concept of work performance has added more to its understanding despite the lack of empirical testing. Campbell

describes work performance as what an organization hires one to carry out. This concept formulation actually distinguishes work performance from an organizational performance or national performance. Moreover, Campbell (1990) asserts that core task proficiency, displaying effort, and maintaining personal discipline are components of every job and some latent performance dimensions could be generalized across a broad range of jobs. This model is becoming an increasingly significant component of industrial and organizational psychology research because it could provide the basis for developing approaches to measuring and predicting performance across a range of jobs.

Among other theories applicable to work/job performance is socio analytic theory. The theory was propounded by Hogan (1991) and Hogan and Shelton (1998), and it is rooted in interpersonal psychology (Carson, 1996). The theory suggests that work/job performance is predicted based on social motives moderated by social competency. The theory described how one's perception of personality can shape social behavior. Hogan and Holland (2003) discovered that personality measures may be better predictors of work/job performance. This theory argues that career success is greatly influenced by motives of getting along and getting ahead and that personality as well contributes to job outcomes. This finding has been supported by the meta-analysis of 43 studies carried out by using the Hogan personality inventory in predicting work/job performance (Lee & Scott, 2006).

According to Blickle et al. (2011), the socio analytic theory is useful for developing a more informed understanding of employee work/job performance and behavior in organizations. Furthermore, Hogan and Holland (2003) have also used this theory to understand individual differences in employee performance and to explain the links between personality trait and work/job performance. Furnham (2008) in his book



discussed how individual differences, specifically personality, are used in predicting and explaining work behaviors in relation to job satisfaction. Furnham (2008) concluded that one can understand the individual differences relationship to work-related behavior using personality testing in the workplace.

In this present study, work performance is one of the favored variables to determine how effective the softs skills acquired by the trainees or employees after attending the training program has contributed to their work performance enhancement.

### **2.5.1 Factors Hindering or Contributing to Work Performance**

Work performance has been described using a variety of different contributors. Though Campbell (1990) regarded performance as behaviour, many more factors contribute to performance more than the employees' behaviors and action. As such, a number of research studies have suggested various factors that affect work performance and these have to be considered by all managers seeking enhanced working environment.

Looking at the underlying factors explaining the relationship between work performance and individuals, one of the variables used to predict work performance is personality (Rothstein & Goffin, 2000). The five (5) personality factors described in the literature are: *emotional stability*, *extraversion*, *intellect/openness*, *agreeableness*, and *conscientiousness*. In addition to personality, employee well-being and work environment are also considered as other contributors to work performance. Baptiste (2008) examined the effects of employee well-being on job performance, and noted that the business-oriented performance has given little importance to employee well-being, even in human resources management. Insisting on the importance of employee well-being for work performance, Baptiste (2008) concluded that one side focus of the

researchers has made organizational outcomes to be at the expense of employees. A study in Singapore by Low and Quek (2006) shows a significant relationship exists between employee performance and a conducive work environment.

In addition, research shows that motivation enhances work/job performance, as it is regarded as a basic psychological process (Kamali, Bakhtiar, Muhammad, & Alibat, 2007). In fact, motivation means “to move” in Latin (Wade & Tavis, 2008), and motivation in its definition has been described as a process of stimulating people to action, in order to accomplish a desired task. It is the need or drive within individuals that generates goal-oriented action; and the extent of this drive depends on the perceived level of satisfaction that can be achieved by the goal. According to Chowdhury (2007) both extrinsic and intrinsic motivation have key roles in influencing employee work performance. In other words, the more employees are intrinsically and extrinsically motivated, the more their work performance increases. Employee motivation affects work performance in theory and practice (Bjorklund, 2001), as evidenced by increased job performance when outside forces such as money, promotion and additional incentives are provided. Though motivational constructs related to performance can be studied under individual differences perspectives (Sonnetag & Frese, 2001); sometimes employee performance will not be examined based on the nature of carrying out duties but with the motivational factors derived from the job.

Some of the evidence showing these positive relationships are as follows: a study by Fauzilah Salleh et al. (2011) on the effect of motivation on job performance of state government employees in Malaysia shows that motivation and job performance are positively related. Similarly, there is a significant direct effect of monetary motivation on employee work performance resulted from the study done by Mak Met, Ibrahim Ali

and Juhary Ali (2015). Another study by Mohammad Saeid Aarabi et al. (2013) on the relationship between motivational factors and employee job performance in the Malaysian service industry showed that among the motivational factors, two variables were found to be significant predictors of job performance: training which contributes 40.4% to job performance and promotion which contributes 43.4%.

Many studies have also linked employee's attitude to work performance (George & Brief, 1996). This is in terms of how positive attitudes toward one's job can predict a high degree of work/job performance. For example, Maripaz Abas et al. (2013) studied employability skills and task performance of government sector employees and showed that positive attitudes and behaviors emerged as the top most preferred and acquired skill. Researchers also have focused largely on employee attitude such as job satisfaction as one of the key factors enhancing work performance. In other words, there is a relationship between job satisfaction and job performance (Petty, McGee, & Cavender, 1984). Shore and Martin (1989) assert that a differential association was found between job satisfaction and job performance in their study. Included in their study is the association of organizational commitment with the job performance and turnover; however, they found that job satisfaction was related more strongly than organizational commitment. Hence, they suggest that specific job attitudes are more closely associated with task related outcomes such as job performance ratings. Rothstein and Goffin (2000) to make a case that if it was found that employees' attitude was reflected in their job performance, as satisfaction is an attitude about the job, most likely, the relationships between employee job satisfaction and job performance could be claimed. Industrial psychologists, however, still disagree over justifying the relationship between job satisfaction and performance despite the related findings.

Another area examined by researchers in relation to work performance is trait anxiety (Mughal, Walsh, & Wilding, 1996). The potentially causal influence of trait anxiety on the reporting of stress has been examined in a number of studies with mixed results. For example, a study by Kwok Bun Chan et al. (2000) in Singapore, on work stress among six professional groups, revealed that performance pressure and work family conflicts were perceived to be the most stressful aspects of work which in turn affect or influence job performance.

In summary, from the extant literature, there are many factors that will influence work performance as mentioned; personality, employee well-being and work environment; motivation; attitude, and so forth; however, the focus of the present study is to explore how soft skills acquired by the trainees or employees from attending the training program conducted and delivered by a trainer using '*time space learning*' – training methodology impact on the trainees' work performance.

### **2.5.2 Measuring Work Performance**

Measuring work performance is one of the most prominent and a pervasive characteristic of any business organization and it has attracted attention due to its perceived effects on the relationship between the organization and its success. Neely (1995) described performance measuring system as "*a set of metrics used to quantify the efficiency of an action*". As such, a prominent characteristic in an organization such as performance measuring system is one of the strategies and approaches in monitoring overall effectiveness of the organizational plan and how it can be improved (Atkinson, Waterhouse, & Wells, 1997). No wonder that many organizations are spending

considerable resources on how to measure work performance by looking for ways in developing measuring approaches and criteria.

Moreover, despite the fact it is one of the crucial constructs in industrial and organizational psychology, and that it is an integral part of organizational planning (Barnard, 1962), much is still unclear regarding measurement of work performance. Developing theories, concepts, and measurements for achieving objectives of enhancing the utility of available procedures and programs and deepening our understanding of the psychological and behavioral processes involved in work performance has posed a serious challenge to researchers and practitioners (Cascio, 1998). Besides, it was evident from previous studies that researchers have used countless numbers of measures as work performance indicators and there is no general consensus about the meaning of the concept “*performance measurement*” to researchers (Neely, 1999).

When exploring why business performance measurement is so critical, Neely (1999) identified seven (7) main reasons why it should be on the agenda of any organization.

The main reasons identified are:

1. Changing nature of work.
2. Increasing competition.
3. Specific improvement initiatives.
4. National and international quality awards.
5. Changing organizational roles.
6. Changing external demands.
7. The power of information technology rings their performance.

Robert (1991) suggested that *“industry and trade associations can play a very helpful role in identifying key performance measures, researching methodologies for taking these measures, and supplying comparative statistics to their members”*. After all, it is well known that the performance measurement system is very important in the industrial and organization environment and the best performance indicators are the ones that enhance business operation in the entire organizational structure (Hornee, 1994).

One of the performance measurements proposed by Eccles (1991) is the development of competitive benchmarking. According to him, benchmarking *“involves identifying competitors and/or companies in other industries that exemplify best practice in some activity, function, or process and then comparing one’s own performance to theirs”*. This development of competitive benchmarking makes performance measurement easier to tackle in the organizational sector as it gives those who manage the affairs of the organization a methodology that can be applied to the financial and non-financial activities of the organization. As such, this has a positive effect on the managerial mind set and perspectives.

In addition, a number of researchers have mentioned personality for measuring work performance. Hogan, Holland, and Roberts (1996) asserted that personality measurements are valid predictors of work performance. They questioned the previous belief which held that personality lacks validity as a measure for work performance. Notably in their work is the claim they made on personality as a predictor of work performance heavily relied on the empirical analysis conducted by many authors in organizational psychology. Barrick and Mount (1991) examined personality as a predictor of work performance and found a relationship between agreeableness and performance for team-oriented jobs. A study of valid predictors for all occupational

groups reveals that conscientiousness is a constant variable. Thus, it is predicted by Goffin et al. (2000) that the trait of conscientiousness will be positively correlated to work performance across business organizations. Goffin, Rothstein, and Johnston (2000) noted that many variables might influence work performance; they proposed that studying the relationship between personality and work performance is very important in organizational psychology.

However, it should be stated that skepticism still prevails in some circles. Some researchers in applied psychology are not persuaded that personality measurement is useful for understanding work performance (Blinkhorn & Johnson, 1990; Reilly & Warech, 1993). The Guion and Gottier (1965) study concluded that there was no evidence for the validity of personality instruments. Perhaps that is the reason the claims made stimulates a new generation of research that ultimately reversed earlier critical conclusions on using personality for measuring work performance.

Griffin, Neal, and Parker (2007) proposed the notion of fixed tasks as defining work roles within dynamic organizational contexts. According to Griffin et al. (2007), performance assessment was made across three (3) contexts of work performance and these include: *core task performance*, *team performance*, and *organizational performance*. Work performance also takes into account the changing nature of work and organizations as well as the interdependent and uncertain nature of organization systems and sub-systems (Griffin et al., 2007). The 'Individual Task Behaviors' subscale from the work performance questionnaire (Griffin et al., 2007) measures core task performance. In this scenario, supervisors rated their employees' performance on specific tasks and transfer of training. However, various studies conducted have also pointed out serious problems in using supervisor/superior ratings as a reliable and valid

dependent measure (Cook, 1988). Having said that, the core task dimension of work performance and team performance will be my focus or scope in this present study since it is the one most monitored by supervisors.

### **2.5.3 Work Performance Relationship with Soft Skills**

The employee's professional training and development are not uncommon in any organization. However, as organizations become more focused on providing services which are behaviors related to the job (Kantrowitz, 2005), organizational scholars and practitioners are now displaying a growing interest in soft skills competencies and development. In other word, soft skills are broadly applicable to many jobs and their competencies are becoming increasingly more important in organizational success today (Homer, 2001). Weinert (2001) argued that competence enables a person, team, or organization to act and react when performing familiar or novel tasks. A gap still exists where the level of employability skills of graduates and entry level work requirements are unmet, and this has been widely acknowledged (Lindsay, 2002; Ranasinghe, 1992), whereby the term employability skills was coined by the Conference Board of Canada (CBC) in 1992 as "soft", "core competencies", "core", "critical", "generic", "key", and "essential".

Over the last few decades, though soft skills are broadly applicable to a variety of jobs, soft skills possession in the organizational market is becoming a criterion for executive available positions. This has been attributed to its significant impact on work performance. Homer (2001) listed various soft skills affecting project and job success. Even some organizations might not be much more concerned with employee technical skills, but with soft skills needed to be successful within their organizational environment. This has been explained, as a result of the fact that they will still have to



train the employee in line with organizational standard (Weber, Finley, Crawford, & Rivera, 2009). Furthermore, it should be noted that soft skills competency constantly leads to higher individual performance; thus, making it a key factor helps in developing a capacity to sustain a competitive environment. While organizations today recognize how soft skills develop employee confidence, the role they play in maintaining customer relationship has also been mentioned. This is because such skills have been considered as an integral part of everyday business which helps the employee to collaborate with others to influence job situations. The study by Staffan Nilsson (2010) revealed that competence combined with interpersonal skills (soft skills) significantly influence employability.

Unlike before, where there was little or no evidence to show the importance of soft skills competencies and how they make a difference in an organization, research studies have shown that they really matter. According to Weisenger (1999), more empirical evidence is becoming available showing that soft skills really do affect the organizational bottom line. Recent development of interest in soft skills competencies appeared to have a relation with the reported result of work/job success. That is why organizations are more willing to invest in soft skills development for better work performance, especially for high executive levels (Homer, 2001).

In identifying the research gap, I looked at past studies on work performance in relation to its contributing factors, and found that most did not show any research done on specific soft skills acquisition by the learners or trainees after attending the soft skills training and the impact of such training on their work performance. Most of the research areas relating to work performance from past literature in Malaysia were on: *job satisfaction* (Annierah M. Usop et al., 2013; Nasrin Arshadia, 2010; Raduan Che Rose

et al., 2009); *workplace environment* (Low Sui Pheng et al., 2006); *quality systems* (Bayo-Moriones et al., 2001); *employee well-being* (Nicole, 2008); *motivation* (Fauzilah et al., 2011; Nasrin Arshadi, 2010); *monetary reward and promotion* (Hayrol Azril et al., 2010; Mak Met Ibrahim Ali & Juhary Ali, 2015; Mohammad Saeid Aarabi et al., 2013); *training effectiveness* (Mohammad Saeid Aarabi et al., 2013; Shirley Ken Tzu Ting et al., 2012); *stress & anxiety* (Azman Ismail et al., 2009; Choi Sang Long et al., 2014; Kwok Bun Chan et al., 2000; Sai Mei Ling et al., 2014); *workers' competence* (Rahmah Ismail et al., 2010); *attitude and personality* (Suzana William Jalil et al., 2015; Zahra Izadikhah et al., 2010); *ethics* (Yih- Teen Lee et al., 2011), *workforce reduction* (Hema A. Krishnan et al., 2002; Way, Sean A., 2002); and many others unrelated to this present study.

As described before, the extant literature in Malaysia did not show any research done on soft skills acquisition by the learners or trainees after attending the soft skills training program to impact on their work performance. More examples such as survey study by Maripaz Abas et al. (2013) were on employability skills and task performance of government sector employees. In addition, positive attitudes and behaviors emerged as the top most preferred and acquired skill. Additionally, the Shirley Ken Tzu Ting et al. (2012) study on whether effectiveness of training program influenced teacher's job performance in Malaysia, showed that all levels of effectiveness have significant relationship with job performance. Further study by Mohammad Borhandden Musah et al. (2016) on organizational climate as a predictor of workforce performance in Malaysian higher education institutions revealed that a healthy and positive organization climate has strong predictive power on academic staff work performance. These findings are congruent with the findings of Lichtman (2007). Further study by Raduan Che Rose et al. (2009) on the effect of organizational learning on organizational

commitment, job satisfaction and work performance in Malaysia found that organizational commitment and job satisfaction are positively related with work performance. To sum up, past researches in Malaysia do not show any study done on actual soft skills acquired from attending a training program and how the training impacted on work performance. The research gap to be tackled by the present study is evident here.

The research model in this present study has two distinctive features. Firstly, this research model employs a survey research method studying the effect of soft skills on employee work performance using a method which captures data after the training event finished at a period of three (3) to four (4) months (using '*time space learning*' - training methodology) when the program ended. Secondly, the data collected at this point is examined for their effects on employees' work performance in relationship to training methodology ('*time space learning*') used, and the trainer's effectiveness in delivering the soft skills training program.

## **2.6 SUMMARY OF RESEARCH GAPS**

Research gaps from the present study are obvious here, after thorough review of the literature. Most of the past studies on soft skills (SS) concentrated mainly on their importance and the need to have those soft skills. Past studies also had concentrated more in relation to the educational environment instead of business working environment. Likewise, past studies on soft skills particularly in Malaysia also emphasized more on the importance and the needs of having these skills.

The extant literature does not consider the relationships between training methodology – ‘*time space learning*’ (TM), trainers’ effectiveness (TE) and work performance (WP) which are of great concern to the present study. Hence, a clear indication of a research gap from past studies versus this present study necessitated a study to discover the relationship of soft skills acquired from the training program (from the trainer teaching it and training methodology – ‘*time space learning*’ being used) and the impact on employee work performance.

As for the training methodology (TM) – ‘*time space learning*’ variable, we can see the research gap between this present study and the previous studies in which the ‘spacing effect’ or ‘*time space learning*’ of this training methodology approach has not been critically evaluated in the literature. Based on review of literature related to training methodology done in Malaysia, none of the studies reviewed had shown any of that ‘*time space learning*’ or ‘spaced learning’ or ‘space effects’ being studied locally; most studies were on other aspects of training method or methodology.

With regard to trainer’s effectiveness (TE) variable, past and recent studies overseas on the effectiveness of the training showed that there is no consideration on the relationship of trainer’s effectiveness towards soft skills acquisition from the training program utilizing ‘*time space learning*’ - training methodology and its impact on work performance. All the extant literature does not consider the relationship of trainer’s effectiveness with the soft skills acquisition per se, and this clearly shows that there is a gap between of what is being studied and the intended present study.

Likewise, the extant literature reviewed on Malaysia researchers also shows that the studies done were on many varied aspects of training effectiveness (but not the trainer);

no studies were found on the trainer's effectiveness relationship with soft skills acquisition from the training program conducted. In addition, past studies on training effectiveness focusing on the trainer's effectiveness is again scarce or has not been shown as most Malaysian studies focused on other aspects of training effectiveness involving various areas and industries. Moreover, the literature on Malaysia does not show any empirical study had been done on quantifying how effective the trainer's performance had contributed to the trainees' soft skills acquisition specifically after trainees completed the soft skills program delivered by the trainer using the '*time space learning*' training methodology; and how effective the acquired soft skills had contributed to work performance. This clearly shows a gap existed in the past research.

To sum up, in identifying the research gap for work performance (WP), I examined past studies in relation to factors contributing to work performance, and found that most did not show any research done on specific soft skills acquisition by the learners after attending the training and its impact on their work performance; but most studies were on the importance of having soft skills and the needs and urgency to acquire them. The gaps with the present study are clearly shown here for all the variables TM, TE, SS and WP in this present study.

## **2.7 SUMMARY OF RESEARCH HYPOTHESES**

To answer the five (5) research questions, the corresponding five (5) research hypotheses were described based on findings in the literature review. Following are the summary of the specific research questions and hypotheses to be investigated in this research study:

- 6) Does the soft skills (SS) acquisition have a direct influence on work performance (WP)?

**Hypothesis-1:**

*Soft skills (SS) acquisitions directly influence employee work performance (WP).*

- 7) Does the training methodology (TM) have effect on the soft skills (SS) acquisition?

**Hypothesis-2:**

*Training Methodology (TM) has a positive impact on Soft Skills (SS) acquisitions.*

- 8) Does the soft skills (SS) acquisition mediate the relationship between training methodology (TM) and work performance (WP)?

**Hypothesis-3:**

*Soft Skills (SS) acquisitions mediate the relationship between Training Methodology (TM) and Work Performance (WP).*

- 9) Does the trainer's effectiveness (TE) have effect on the soft skills (SS) acquisition?

**Hypothesis-4:**

*Trainer's Effectiveness (TE) positively influences Soft Skills (SS) acquisition.*

- 10) Does the soft skills (SS) acquisition mediate the relationship between trainer's effectiveness (TE) and work performance (WP)?

**Hypothesis-5:**

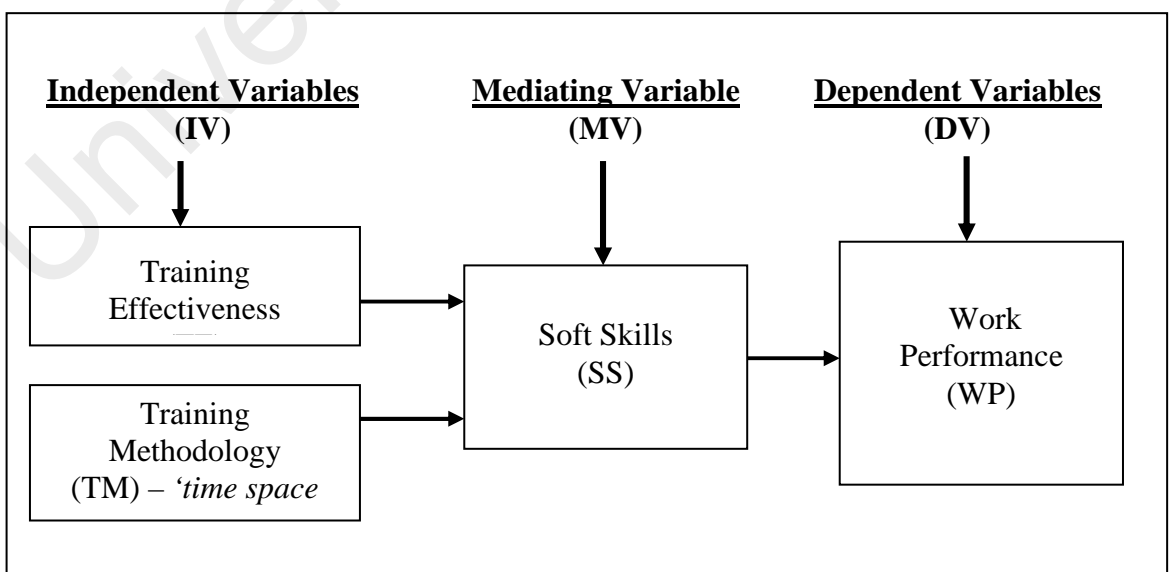
*Soft Skills (SS) acquisitions mediate the relationship between Trainer's Effectiveness (TE) and Work Performance (WP).*

**NOTE:**

The usage of the term training methodology (TM) in this research study signifies that the methodology used in delivering of the soft skills training program utilizes a '*time space learning*' - training methodology with 'spaced break' of 3 to 4 weeks in between sessions.

## 2.8 CONCEPTUAL FRAMEWORK

Systems theory was first proposed in the 1940s by a well renowned biologist Ludwig Von Bertalanffy and furthered in a study by Madden and Ashby (1972). The conceptual framework of the present study, presented in Figure 2.1, is based on systems theory as well as learning theory using '*time space learning*' - training methodology (McDaniel, Fadler, & Pashler, 2013). Based on the five (5) hypotheses developed from the abovementioned literature review, the conceptual framework for this present study is shown in Figure 2.1.



**Figure 2.1:** Conceptual Framework of the Study.

According to systems theory, all systems consist of related and interconnected parts which cannot be viewed separately, but are all interconnected as a holistic approach which is allowed within organizations (Jacobs, 2003). Hence, the dependent variable (work performance) in the context of this research could be influenced by many different factors, but not limited to the organizations' incentives or employee satisfaction in the organization or the remuneration or the training content delivered to trainees. Though the theory has been attacked for being pseudoscience, however, it is still being adopted because it addresses the objectives of this present study.

Additionally, in line with the present research are two independent variables namely trainer's effectiveness and '*time space learning*' training methodology that could equally influence the aforementioned dependent variable. The research model in this present study is designed to analyze constructs considered by the literature to be fundamental in determining the contributing factors of work performance in an organization. Constructs of particular interest for this present research are on one hand, '*time space learning*' training methodology (*TM*), and *trainer's effectiveness* (*TE*) as independent variables. On the other hand, is *work performance* (*WP*) which is the dependent variable, mediated by *soft skills* (*SS*) in the context of the present research. Therefore, and accordingly, these parts make up the system in relation to systems theory which states that all systems consist of related and interconnected parts which cannot be viewed separately, but are all interconnected (Jacobs, 2003). In the context of the present study are '*time space learning*' training methodology and trainer's effectiveness in relations to soft skills; and soft skills in relations to work performance.

An examination of the conceptual framework model in Figure 2.1 uncovers three (3) main areas. Firstly, the direct relationships between soft skills (*SS*) acquired and



employee work performance (WP); which are of relevance to this study. Secondly, the indirect effect of soft skills on work performance through '*time space learning*' training methodology (TM) used in the soft skills (SS) acquisition; as well as the indirect effect of soft skills (SS) on work performance (WP) through trainer's effectiveness (WP) in delivering the soft skills training programs to the trainees or employees; and thirdly, to examine the role of '*time space learning*' - training methodology (TM) on the soft skills (SS) acquisition as well as examining the role of trainer's effectiveness on soft skills (SS) acquisition.

In support of this, an empirically tested study carried out by Y A Mohammed and Hazril (2016) adopted soft skills as the mediating variable too. The study by both researchers found that soft skills mediate the effects of training on employee job performance. Further analysis of their study indicates that there is significant relationship between soft skills and job performance.

## **2.9 SUMMARY**

Research on the impact of soft skills training and development using '*time space learning*' training methodology, in particular, toward work performance is scarce; and the '*spacing effect*' of this learning approach in the world of business training has not been critically articulated in literature, and in Malaysia particularly, the extant literature did not show any such study has been done. In view of the popularity of '*massed learning*' (Sutton et al., 2002) which involve classroom (off-the-job) training programs that run consecutively and participants learned all at once (massed) in that consecutive number of days; compared to '*spaced learning*' (Brown, 2005) in which there are '*breaks*' or '*time space*' given, to allow participants to apply what they had learned in

the classroom in the real workplace environment, more research is needed on comparing these two methods. Therefore, the present study will investigate how significant are the effects on work performance (WP) of trainees from the new acquired knowledge and skills related to soft skills (SS) areas acquired from the training program, after being implemented in their job.

In addition, another objective of this present study is to examine the degree of the '*time space learning*' training methodology (TM) affecting the soft skills (SS) acquired in the classroom (off-the-job) training (Noe, 1999); and to examine the trainer's effectiveness (TE) in imparting the soft skills training using the adult experiential learning theory or approach (Gonzalez, 2008).

## CHAPTER 3: RESEARCH METHODOLOGY

### 3.1 INTRODUCTION

In this chapter, the study adopts an exploratory and descriptive approach to focus on the effect of soft skills, '*time space learning*' training methodology and trainer's effectiveness on employees' work performance. Thus, this chapter describes in detail the research methodology used in this study to answer the proposed research questions and hypotheses described herein. The chapter is divided into various sections: research design, research questions and hypotheses, population and sampling size, instrumentation development and validation, data collection and data analysis procedures.

The research was designed to use a survey research method in studying the effect of soft skills acquisition by trainees or employees after attending training on employees' work performance. The units of analysis were the volunteered participants or trainees from nine (9) Malaysian-based organizations (*private, government & state government, government linked companies, and multinational organizations*) - see Appendix-1: List of Participants' (or Respondents) Organizations.

The purpose of this study is in two (2) fold with regard to testing of soft skills acquisition among participants towards their work performance enhancement. First, is to examine the soft skills competencies acquired and their influence on employees' work performance. Second, by examining the influence of both training methodology ('*time space learning*') and trainer's effectiveness on soft skills acquisition by the employees after attending the training program; which will directly affect their work performance.

Since the research model is dealing with unobserved (latent constructs) variables i.e. a concept that cannot be measured directly through questionnaires, hence, regression analysis is not advisable. Literature reviews showed that there are relationships among the variables work performance (WP), trainer's effectiveness (TE), training methodology (TM), and soft skills (SS) acquisition, therefore, I decided to use SEM analysis to establish these relationships because SEM can handle relationships among unobserved/latent constructs.

The chapter provides a detailed description of the study design, research instruments, research question and hypotheses, sample criteria, research population, data collection procedures, and data analysis which employed predictive research method via the use of Structural Equation Modeling (SEM) analysis instead of regression equation approach used in econometrics. A family of statistical methods, Structural Equation Modeling (SEM) is designed to test a conceptual or theoretical model (Kaplan, 2000).

### **3.2 RESEARCH DESIGN**

This research study used a survey research questionnaire to study the competencies of various Malaysian-based organizations employees at manager, executive and supervisory level who had undergone a soft skills training program over a period of a few weeks/months (i.e., soft skills training program not run consecutively but run with a break or '*time space*' in between each session), in order to investigate the '*spacing effect*' of the learning.

Survey research can be defined as a process of collecting data by asking questions and recording the participants' answers (Whitley, 1996). The term survey also refers to a

research technique whereby data is collected by asking questions to elicit responses from a group of people, who are called respondents (Ary, Jacobs, & Razavieh, 2002). Survey research is status or normative research, and if the researcher controls for errors, the results can be generalized to a target population (Miller, 2004). Thus, this research study used a quantitative, descriptive research design in examining the relationships among the variables with regards to soft skills development and employees' work performance.

Quantitative research designs are either predictive or explanatory in nature. Quantitative prediction design is aimed at identifying variables to predict a certain outcome, to describe and forecast a trend or a phenomenon, or to discover if there is a tendency to certain responses among individuals (Creswell, 2003). Prediction design typically identifies a predictor variable (or independent variable) to expect the outcome of cause-and-effect, which is the criterion variable (Creswell, 2003). The quantitative survey questions in this research study were predictive in nature. However, the predictive use for this study is more of an exploratory and non-experimental form of quantitative research (Johnson & Christensen, 2004).

Descriptive analysis followed by Structural Equation Modeling (SEM) can aid in learning about and describing the characteristics of employees towards soft skills development as well as predicting the outcome of the work performance among trainees or employees who attended the soft skills training program. Numerical indexes such as averages, percentages, and measures of spread can be calculated, and variables can be summarized one at a time or examined for interrelationships. The focus here is to ferret or search out cause-and-effect relationships among the variables in this study.

In addition, this research study also explored the '*time space learning*' - training methodology being used, the work performance improvement and the trainer's effectiveness in delivering the soft skills training program to the trainees or employees. A rich understanding of soft skills development was desired to assist in determining how to improve work performance; and how to determine the effect of '*time space learning*' - training methodology in transferring soft skills to the trainees. A self-administered, cross-sectional survey (*a type of observational study involving analysis of data collected from a population, or a representative subset, at one specific point in time*) was the most appropriate method of data collection for this study (Brewer & Hunter, 2006; Weimer, 2006).

According to Fowler (2002), the four (4) categories self-administered survey provides confidentiality and anonymity, which increased response rates and accuracy. Thus, the objective of this research study was to explore the extent to which employees of the various companies involved in the soft skills training program develop, change and transfer their acquired soft skills into their real workplace environment during the '*time space learning*' period given approximately 3 to 4 weeks (i.e., time space or break) and after the training had ended approximately in 3 to 4 months. The intention was to predict possible outcome or trends. Therefore, the predictive design was appropriate to the nature of this study.

**NOTE:**

The soft skills program syllabus ranges from 4-days to 8-days training (depending on the request for customization from the organization), but they are all conducted in a few sessions of 2-days period per session with another 1-day follow-up session i.e. using '*time space learning*' – training methodology.

### 3.3 POPULATION AND SAMPLING TECHNIQUE

The research study was conducted with a good mix of employees or participants coming from various organizations or companies (*private sectors, state government, government linked, and multinational companies*) based in Malaysia (see Appendix-1: List of Participants' (or Respondents) Organizations). The 'qualified' respondents of this study were active managers, executives and supervisory level employees identified by their company to attend the soft skills development program over a period of a few months (i.e., program not run consecutively or 'massed learning', but run with a break or 'time-space' in between each session, which is 'time space learning' – training methodology). There were 260 trainees or participants, coming from the nine (9) different organizations (*private sectors, state government, government linked, and multinational companies*) based in Malaysia with a total population size of approximately 800 to 850 employees at manager, executive and supervisory level, attended the soft skills training programs at different time and location where the training is conducted.

#### 3.3.1 Sample Size

Different samples can be randomly selected from the same population in survey sampling. Each sample can often produce different confidence intervals or margin of error. The margin of error (or confidence interval) is the positive and negative deviation allowable in a particular survey. Some confidence intervals include the true population parameter while others might not.

Researchers have suggested the minimum number of subjects needed for various types of research. For descriptive studies, Fraenkel and Wallen (2008) argued that a sample with a minimum number of 100 is essential. Correlational studies require a sample of at least 50 to establish existence of a relationship. For experimental and causal comparative studies, a minimum number of 30 per group is recommended. Pallant (2005) suggested that in a study of causality especially when regression analysis is to be used as analytical tool, a sample size of minimum 15 respondents per variable is ideal.

On the other hand, according to Krejcie and Morgan (1970), sample size of 260 and 265 is necessary to represent a population size of 800 and 850 respectively. More specifically, for populations of 800 people, 260 respondents are needed for accuracy of 5 percent at  $\alpha = 0.05$  (i.e. margin of error and confidence interval). Creswell (2003) suggested that the larger the sample size, the higher the confidence level; the smaller the error variance, the better representation of the results, and the more homogeneous the sample, the richer the information. Confidence level refers to the probability that our estimations are correct (Sekaran, 2003) i.e. the percentage of all possible samples that can be expected to include the true population parameter. For example, suppose all possible samples were selected from the same population of 800 to 850 employees in these nine (9) different organizations, a 95% confidence level implies that 95% of the confidence intervals would include the true population parameter.

The target population in all these selected nine (9) different organizations (*private sectors, state government, government link, and multinational companies*) based in Malaysia - see Appendix-1: List of Participants' (or Respondents) Organizations; consisted of about 800 to 850 population of employees at manager, executive and supervisory level or trainees. Hence, for this study the sample size to represent this



population of trainees needed to be at least 260 for a 95 percent confidence level within .05 risk of sampling error (Krejcie & Morgan, 1970). This study managed to get 260 participants or trainees as the study sample size.

### **3.3.2 Sampling Procedure**

In this research study, I could not use random sampling method but instead used population sampling i.e. I obtained information from specific target population, instead of those who were most conveniently available (Sekaran, 2003). This population sampling is confined to specific types of 'qualified' respondents who can only provide the desired information (i.e., they conform to certain criteria). The 'qualified' respondents of this study refer to active managers, executives and supervisors level of employees identified (or nominated) by their organization to attend the soft skills training program over a period of a few months (i.e., using '*time space learning*' = training methodology). Those participants who attended the soft skills program running consecutively (massed learning) were ineligible to be the respondents. The participants (or respondents) respond to questionnaires representing the soft skills competencies, '*time space learning*' - training methodology, trainer's effectiveness and work performance.

## **3.4 INSTRUMENTATION**

This section describes the instruments used to measure the variables in this study. It also also describes *validity* and *reliability* issues related to the instruments. The research survey instrument consisted of four (4) main categories of questionnaires to be answered by the participants. In addition, at the start of the training, participants filled each demographic

questionnaire containing questions 1-10 (see Appendix-2), which were multiple choice questions that collected background information on trainees or participants. The intention was to collect and use this background data to determine any patterns by various defining characteristics such as highest degree earned and years of experience.

For the constructs on soft skills (SS), trainer effectiveness (TE), and '*time space learning*' - training methodology (TM), the instruments were all self-developed and adapted based on an extensive review of professional research and dissertation studies. In addition, four (4) experts (professional trainers) with over 30+ years of experience in the soft skills training field were consulted for appropriate questions and input in developing the instruments. As for the Work Performance (WP) instrument; the items were fully adopted from Griffin (2003). In addition to the abovementioned, specifically, for soft skills (SS), the items were adapted based on the syllabus (learning objectives) of the SS training program itself and from various soft skills training literature; for trainer's effectiveness, they were adapted based on Kirkpatrick's 4-levels of training evaluations model; and for training methodology (TM), they were adapted based on comparison of various training methodology and with Dale Carnegie's training processes and '*time space*' methodology that are being used since it started in 1912.

The scale used in this study was a 5-point Likert Scale of *1-strongly disagree, 2-disagree, 3-neither or neutral, 4-agree, 5-strongly agree*. A Likert scale presents respondents with a set of statements about some person or thing or concept and requires them to respond by rating their agreement or disagreement with the statements on a numerical scale that is similar for all the statements (Whitley, 1996).

The first assessment involved work performance (WP) instrument scale fully adopted from Griffin (2003). The subsequent self-developed adapted assessment instruments are

soft skills (SS), trainer's effectiveness (TE) and the '*time space learning*' - Training Methodology (TM); precisely to investigate the effect of '*time space learning*' training methodology used in transferring the soft skills for enhancing work performance. Each instrument was used to collect responses from the participants of the soft skills training program through self-administered at the end of the training program (approximately 3 to 4 months from the commencement date).

#### **3.4.1 Soft Skills (SS) Instrument**

These self-developed soft skills (SS) questionnaires contained items adapted from different professional training programs on soft skills; and from the syllabus or curriculum covered in the training programs; were all backed by academic literature; and by subject matter experts (professional trainers) with 30+ years of experiences. The questionnaires too are often being used in the business training industries.

The scale used in this research survey instrument is a 5-point Likert Scale: *1-strongly disagree, 2-disagree, 3-neither or neutral, 4-agree, 5-strongly agree*. Altogether there are 25 questions on soft skill (SS) competencies (see Appendix-3). I collected the filled questionnaires from the trainees at the end of the soft skills training program (approximately 3 to 4 months from the commencement date).

These soft skills (SS) questionnaires were fully tested for reliability and validity in the pilot study. The results yielded Cronbach's alpha reliability coefficient value of .97 for these 25 items soft skills (SS) instrument, which is very reliable (see Table 3.1). For the instrument to be reliable, the Cronbach's alpha value should be .7 or above (Martin, 2005).

To test for instrument validity, I did a content validity test using a panel of judges (subject matter experts) to attest to the content validity. I was able to get four (4) judges who are experts and professionals in the training industry with more than 30+ years of experience to look at the questionnaires and to give their input. The average CVI (content validity index) for the overall instruments in soft skills (SS) was calculated and the result gives a CVI value of 1.0 for SS (i.e., strongly valid). For the instrument to be accepted valid, an average CVI index should be 0.7 or above (Martin, 2005).

**Table 3.1:** Reliability for Measurement Scale

Variables	Cronbach's alpha
Soft Skills (SS)	.97
Trainer's Effectiveness (TE)	.87
Training Methodology (TM)	.91
Work Performance (WP)	.96

### 3.4.2 Work Performance (WP) Instrument

The work performance (WP) instrument contained eighteen (18) items and was fully adopted from Griffin (2003), which was already validated using Factor Analysis by Griffin (2003). The work performance (WP) questionnaire was self-administered and given to each participant for self-evaluation on their work performance improvement if any. The same 5-point Likert Scale was used in this research survey instrument for work performance (WP), namely: *1-strongly disagree, 2-disagree, 3-neither or neutral, 4-agree, 5-strongly agree.*

Form Table 3.1, the Cronbach's alpha reliability coefficient for the work performance (WP) instrument eighteen (18)- item scale is .96 which denotes very good and reliable since the Cronbach's alpha value is 0.7 or above (Martin, 2005). The test for content validity is not needed for this work performance (WP) instrument, since Griffin (2003) had done the validation using Factor Analysis; unlike the other three (3) constructs i.e. soft skills (SS), trainer's effectiveness (TE), and training methodology (TM). See Appendix-4 for the full work performance (WP) survey questionnaires instrument.

### **3.4.3 Trainer's Effectiveness (TE) Instrument**

The trainer's effectiveness (TE) instrument consisted of ten (10) items (see Appendix-5), and these were adapted from Kirkpatrick's training evaluation model; and used to measure the trainer's effectiveness from the trainees' or participants' point of view after having been taught by the trainer/facilitator using various training methods, adult learning, action and experiential learning approach. During the follow-up session, I gathered feedback from participants and gave them a set of trainer's effectiveness (TE) questionnaire to evaluate their trainer/facilitator. Again, a 5-point Likert Scale was used in this study: *1-strongly disagree, 2- disagree, 3-neither or neutral, 4-agree, 5-strongly agree.*

The Cronbach's alpha reliability coefficient for the 10 items trainer's effectiveness (TE) scale is .87, which is above .7, hence it is good and reliable (see Table 3.1). Content validity test on the trainer's effectiveness (TE) instrument was also done. The average CVI (content validity index) for the overall items for this TE instrument is calculated and the result gives a CVI value of 1.0 for TE (i.e., strongly valid since it above 0.7) (Martin, 2005).

#### **3.4.4 Training Methodology (TM) Instrument**

At the end of the last session (after about 3 to 4 months from the start of the training program), finally, the trainer self-administered and gave the trainees a sixteen (16)- item questionnaire with 5-point Likert Scale (*1-strongly disagree, 2-disagree, 3-neither or neutral, 4-agree, 5-strongly agree*) to test the effect of 'time space learning' - training methodology (TM) on their soft skills acquisition. These questionnaires are also self-developed and adapted with support from the literature and professionals and were validated. See Appendix-6 for the full survey questionnaires.

From Table 3.1, the Cronbach's alpha reliability coefficient for this sixteen (16)-item training methodology (TM) scale is .913, which means very good and reliable, since it is above .7 value (Martin, 2005). Content validity test on this TM instrument was also done. The average CVI (content validity index) for the overall instrument for this TM instrument was calculated and the result gives a CVI value of 0.875 (i.e., high validity). For the instrument to be accepted as valid, the average CVI index should be 0.7 or above (Martin, 2005).

### **3.5 INSTRUMENT VALIDATION AND RELIABILITY**

#### **3.5.1 Pilot Study**

The pilot study was conducted in one private multinational company in Malaysia to ensure the validity and reliability of the measurement instruments. The pilot study participants were active managers, executives and supervisor level employees identified by the company to attend the soft skills development program. In this pilot study, the target population is around 100 trainees or participants. Since the target population in

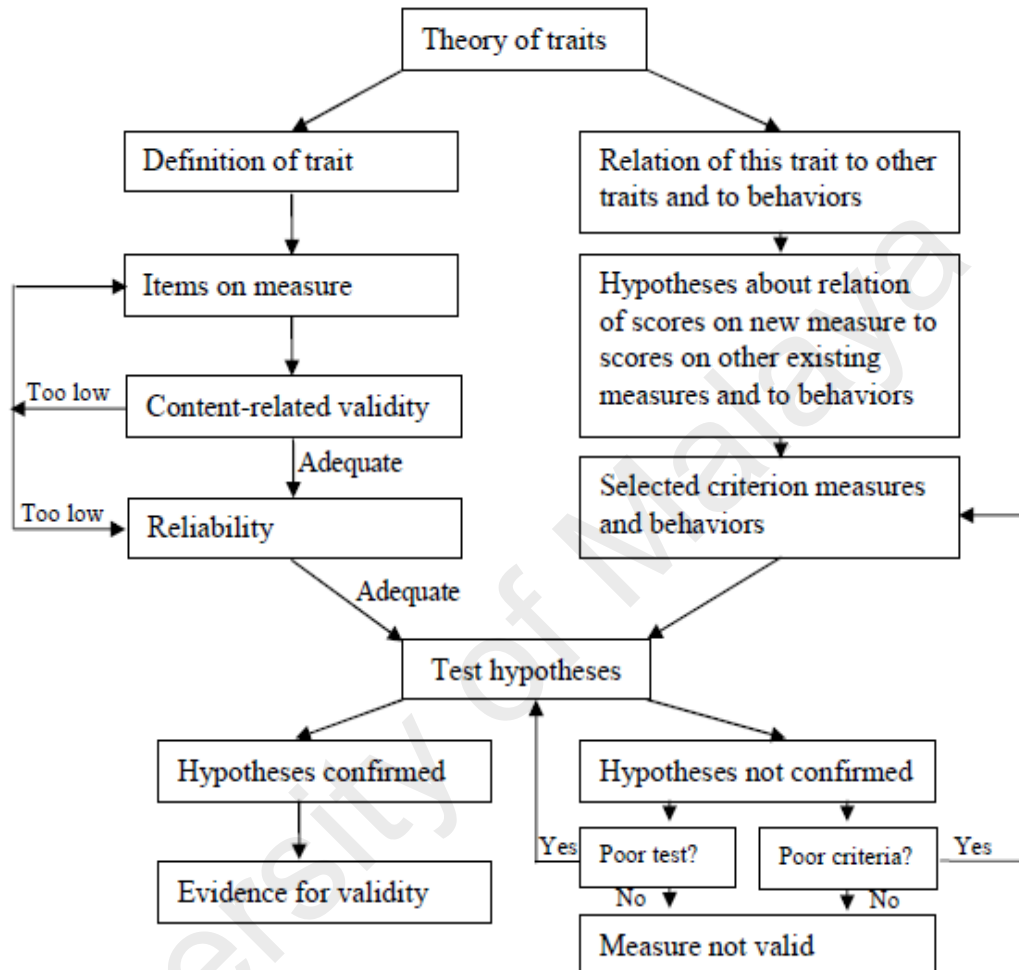
this selected company consisted of about 100 executive and manager level employees or trainees, for this pilot study the sample size of at least 15 respondents per variable is ideal (Pallant, 2005) for a 95% confidence level. In fact, twenty-eight (28) trainees or participants were selected as the pilot study sample and were randomly assigned into two (2) groups. The pilot study used a survey research by using closed-ended questionnaires to investigate the soft skills acquisitions and work performance enhancement after training the group of 28 managers and executives from the same company for approximately two (2) months duration on the soft skills development using '*time space learning*' - training methodology.

For the constructs, soft skills (SS), trainer's effectiveness (TE), and '*time space learning*' - training methodology (TM) questionnaires, I conducted extensive review of research and dissertation studies and consulted several professionals to devise appropriate questions for the current study. The scale used in this study was a 5-point Likert scale of *1-strongly disagree, 2- disagree, 3-neither, 4-agree, 5-strongly agree* (Whitley, 1996).

Since soft skills (SS), trainer's effectiveness (TE), and '*time space learning*' - training methodology (TM) questionnaires are all self-developed, instrument validation is relevant and important. Thus, the Measure Validation Process model (see Figure 3.1) proposed by Whitley (1996) was referenced in this study. The Whitley (1996) model includes the steps: *(1) reviewing theory; (2) setting an operational definition for the variables; (3) developing items of the instrument; (4) assessing instrument content validity; (5) conducting a pilot test, and (6) assessing instrument reliability.*

## (1) Reviewing Theory

In order to design the instrument, several important academic areas and theories were reviewed.



**Figure 3.1:** The Measure Validation Process (Whitley, 1996)

## (2) Setting an Operational Definition for the Variables

These included training effectiveness, soft skills constituents, training methodology – ‘*time space learning*’, experiential learning theory, adult learning theory, Kirkpatrick’s evaluation model, and so on.



There are two (2) independent variables (IV); one (1) dependent variable (DV); and one (1) mediating variable; in the design of this study on soft skills acquisition affecting the dependent variable (work performance). The independent variables are the training methodology (TM) specifically '*time space learning*', and trainer's effectiveness (TE). The mediating variable is the soft skill (SS). These variables were operationally defined as:

- (1) systematic process and a means by which the trainer delivers the soft skills information to trainees;
- (2) the '*space effect*' that enables the trainees to transfer the soft skills acquired into their real workplace environment; and
- (3) the soft skills developed that enhance the work performance and organization efficiency.

### **(3) Developing the Items of the Instrument**

In this study, the variable of soft skills cover areas such as: *self-confidence or self-assurance* (Tracy, 2012), *interpersonal or human relations* (Honey, 1988; Katz, 1991; Strang, 2007), *communications skills* (Leigh, Lee, & Lundquist, 1999; Lussier, 2012; Mantel, Meredith, Shafer, & Sutton, 2004), *attitude* (Mueller, 2012), *leadership skills* (Mantel et al., 2004, Rosenau, 1998), *management skills* (Boyatzis, 1982), *creative thinking skills* (Rosenau, 1998), *problem solving skills* (Leigh et al., 1999; Lussier, 2012), *ethics and professional moral skills* (MOHE, 2006; Leigh et al., 1999).

Training methodology includes '*time space learning*', experiential and adult learning, which basically took place in an off-job-training or classroom method. In addition, for soft skills training program success, trainees must effectively and continually apply the learned capabilities gained in the classroom at their workplace. In short, for effective

training, organizations need to ensure the trainees are able to use what they absorbed during training back on the job, and that trainees display high work performance and competencies on the job (Barnard, 2005).

Therefore, 25 items regarding the soft skills instrument, 16 items for training methodology instrument, 10 items for trainer's effectiveness instrument, and 18 items for work performance instrument were used to investigate the relationships among these variables in the present study research objectives.

#### **(4) Assessing Instrument Content Validity**

Instrument validity requires that the contents of the instrument measure what it is intended to measure. Sekaran (2003) states that content validity “*ensures that the measure includes an adequate and representative set of items that tap the concept*”. To improve prospects for high validity, the instrument was adapted and developed based on a literature review in soft skills (SS), training methodology (TM), trainer's effectiveness (TE), and for work performance (WP) construct it was adopted from Griffin (2003). The scale used in this study was 5-Likert scale of *1-strongly disagree, 2- disagree, 3-neither, 4-agree, 5-strongly agree* (Whitley, 1996).

A panel of expert judges reviewed the questionnaires for content validity; the survey questionnaire underwent a series of revisions by subject matter experts and professionals in Human Resource Development (HRD), particularly in training and development. I was able to get four (4) expert judges who are professionals in the training industry with more than 30+ years of experience to look into the questionnaire validity and to give their input. The experts were also asked for suggestions on item

improvement. I used the formula and the input from the experts to establish the content validity index (CVI) for each of the items. Validity index must be established for each item in the questionnaires and for the instrument to be accepted as valid, the average index of all the items should be .7 or above (Martin, 2005).

From the subject matter experts' input, the average CVI (content validity index) for the overall instrument in soft skills (SS) was calculated and the result gives a CVI value of 1.0 for SS i.e. strongly valid. The average CVI (content validity index) for the overall instruments for trainer's effectiveness (TE) was calculated and the result gives a CVI value of 1.0 for TE i.e. strongly valid. Content validity test on the training methodology (TM) instruments was also done. The average CVI (content validity index) for the overall instrument for this TM was calculated, giving a CVI value of 0.875 for TM i.e. high validity. All the CVI values were above 0.7 which means all the instruments were accepted as valid (Martin, 2005).

#### **(5) Assessing Instrument Reliability**

The reliability of a measure is its degree of consistency; a perfectly reliable measure gives the same result every time it is applied to the same person or thing, barring changes in the variable being measured (Whitley, 1996).

Reliability can be assessed in three (3) ways: (i) *across time (test retest method)*; (ii) *across different forms of a measure (the equivalent forms method)*; and (iii) *for multi-item measures, across items (the internal consistency method)* (Fraenkel & Wallen, 2008). In this study, the internal consistency method, which mainly assesses the degree to which responses to the items in a measure are similar, was used to measure the

questionnaire reliability. Cronbach's alpha was calculated for the second part in the three (3) set of questionnaires completed by all 28 pilot trainees or participants from one multinational organization based in Malaysia.

For the soft skills (SS) instrument, the Cronbach's alpha of the soft skills (items 1-25) was .97; and the Cronbach's alpha of the trainer's effectiveness (TE) (items 1-10) was .87. For the training methodology (TM) – '*time space learning*' instrument, the Cronbach's alpha for (items 1-16) was .913, and the Cronbach's alpha of the employees work performance (WP) (items 1-18) was .96. All the Cronbach's alpha values for all the instruments tested exceeded .7, indicating very good reliability and that the survey achieves acceptable measures of internal consistency (Pallant, 2005). Tables 3.2 show the Cronbach's alpha coefficients for the survey responses.

**Table 3.2:** Cronbach's Alpha Coefficients Value

<b>Variables</b>	<b>Cronbach's Alpha (Coefficients Value)</b>
Soft Skills (SS)	.97
Trainer's Effectiveness (TE)	.87
Training Methodology (TM)	.91
Work Performance (WP)	.96

### **3.6 DATA COLLECTION**

In line with the ethics of research, participants' rights were protected during all stages of the study, including data collection, data analysis and interpretation, as well as in the writing and dissemination of the research. Creswell (2003) and Fink (2006) stated that

participants should not be put at risk, they should have the right to participate voluntarily and withdraw at any time without penalty, they should understand the purpose and procedures of the study, and should understand how the researcher will provide anonymity and confidentiality, among other ethical considerations.

Besides that, permission of the individuals in authority should be gained prior to starting data collection to gain access to study participants at research sites. In this study I took several steps to ensure ethical protection of the research participants. All the materials and the research design methodology utilized in this study were reviewed by the researcher and the supervisor. Permission from the organization's administrator was obtained prior to the study, granting me access to the employees or trainees for participation in the soft skills development training program.

### **3.6.1 Data Dissemination and Collection Process**

To conduct the research and to test the proposed hypotheses, an agreed number of days ranging from minimum of four (4) days up to maximum of eight (8) days soft skills training program syllabus plus a one (1) day follow-up session is being conducted to various groups from various Malaysian-based companies (see Appendix-1: List of Participants' (or Respondents) Organization). In the pilot study, I managed to secure two (2) groups from one Malaysian-based multinational organization to undergo the four (4) days syllabus plus one (1) day follow-up session of soft skills training and development over a period of two and half (2.5) months with 3 to 4 breaks (or space) in between each 2-day session.

Literature review (Brookfield, 1986; Cross, 1981; Jarvis, 1995; Knowles, 1990; Rogers, 2002) concerning adult learning showed that adults as learners have specific characteristics that set them apart from children. These common characteristics have an impact on learning efficacy or effectiveness and the overall classroom experience (Porras & Robertson, 1992). This is where the '*time space learning*' - training methodology (TM) is being investigated for its effectiveness in soft skills learning by the participants.

Firstly, after having finalized all the administrative details and agreement with each organization, I then embarked on a three (3) to four (4) months durations soft skills training programs (because of using '*time space learning*' - training methodology), with 3 to 4 weeks' break (or space) in between each 2-day session, for the identified employees or participants from the various organizations. The training programs covered many soft skills areas such as building *self-confidence* (Tracy, 2012), *communication skills* (Leigh et al., 1999; Lussier, 2012; Mantel et al, 2004), *interpersonal or human relations skills* (Honey, 1988; Katz, 1991; Strang, 2007), *attitude/mindset or personal qualities* (Lussier, 2012; Mueller, 2012), *leadership skills* (Mantel et al., 2004; Rosenau, 1998), *creative thinking* (Rosenau, 1998), *problem solving* (Leigh et al., 1999; Lussier, 2012), and *management skills* (Boyatzis, 1982; Tang, 2012).

Secondly, using the '*time space learning*' - training methodology, after the first two (2) days sessions finished (i.e. session-1), participants will go back to their respective locations to *practice/apply/experiment* at their workplace and in their work/job for a period of 3 to 4 weeks before coming back for subsequent sessions and follow-up. During this '*time space learning*' or break period, participants are to practice and apply

what they had learned (from their individual action-plan developed in the classroom) in performing their day-to-day work. They were also given assignments to be completed for endorsement by their supervisor before submission. This is to ensure they did practice and apply what they had committed (action-plan) before returning for subsequent sessions, as the assignments were made compulsory for them to 'graduate' with certificate upon program completion.

Thirdly, before continuing with the new syllabus/curriculum in the session-2 and/or each subsequent session, participants were asked to report or share with the whole class members about their practiced experiences. In every reporting segment, one of the participants will be rewarded (via class member voting) with a Parker pen, as a form of recognition for their efforts put in during the breaks. Then the participants will continue with subsequent segments in session-2, with another two- day training session.

Fourthly, after that, they will go back for another period of 3 to 4 weeks' break or '*time space learning*' to *practice/apply/experiment* before coming back for the subsequent and/or final 1-day follow-up session. Again, each participant is required to report (or share) with the whole class members on what they had practiced and applied during the previous breaks. Follow-up session is done approximately between 1 to 2 months from the last training session date. Hence, the duration of the whole soft skills training program was between 3 to 4 months in total.

In this way, instead of the soft skills training program being conducted in straight four (4) or five (5) consecutive days, the trainees are in fact, psychologically going through a 3 to 4 month 'training process', which gives ample time for them to willingly develop the skills and change their behaviors and/or attitude.

Lastly, at this point, during the last 1-day follow-up session, the participants were given the soft skills (SS) questionnaires (or instrument) to evaluate their improvement; trainer's effectiveness (TE) questionnaires to evaluate their trainer or facilitator; training methodology (TM) – '*time space learning*' questionnaires to evaluate the effectiveness of the '*time space learning*' – training methodology given for them to apply what they learned into their real work/job; and also the work performance (WP) questionnaires to evaluate their individual work performance improvement or enhancement, from the soft skills they acquired in the training program.

In the pilot study, multiple regression will be the primary data analysis method to test the hypotheses. However, in the actual research study, the data collected are fed into the SEM (Structural Equation Modeling) data analysis software for the final data analysis.

For the thorough detailed research study with bigger sample size; I was able to work with a few more organizations based in Malaysia in order to get the sampling data. The major constraints I faced was to get the organization to agree to send their employees to the soft skills training and development using the '*time space learning*' - training methodology (i.e., with breaks in between sessions), which will take a period of three (3) to four (4) months to complete one group. The number of participants (which will be the respondents) in each training group, would be around 20-25 people per group.

### **3.7 DATA ANALYSIS PROCEDURE**

Two (2) phases of data analysis were employed in the present study. The first phase involved descriptive statistics and the second phase revealed the single group analysis. The Statistical Packages for the Social Sciences (SPSS) version 18.0 (SPSS Inc., 2000)



was used to compute the descriptive statistics and to perform reliability testing. For the single group analysis computation, Analysis of Moment Structures (AMOS) version 18.0 with Maximum Likelihood Estimation (MLE) was used to perform Confirmatory Factor Analysis (CFA) and Structural Equation Modeling (SEM) in the single group. Here, I did not need to do the EFA (Exploratory Factor Analysis) since the questionnaires were not developed from scratch (i.e., that means one has no idea which dimension or category to classify each questionnaire item). I had adopted and adapted all items in the questionnaires, in which items have been classified already (like WP items by Griffin and TE items by Kirkpatrick); and SS items as well as TM items with validity and reliability test already done.

These statistical software and methods used will now be discussed; firstly, AMOS is an added SPSS module and is specially used for Structural Equation Modeling (SEM), Path Analysis, and Confirmatory Factor Analysis. AMOS can quickly perform the computations for SEM and displays the results. In statistics, Maximum Likelihood Estimation (MLE) is a method of estimating the parameters of a statistical model given data. Structural Equation Modeling (SEM) is a family of statistical methods designed to test a conceptual or theoretical model (Kaplan, 2009). The term '*structural equation model*' most commonly refers to a combination of two things: a '*measurement model*' that defines latent variables using one or more observed variables; and a '*structural regression model*' that links latent variables together (Kaplan, 2009). The parts of a structural equation model are linked to one another using a system of simultaneous regression equations (Kline, 2011). In statistics, confirmatory factor analysis (CFA) is used to test whether measures of a construct are consistent with a researcher's understanding of the nature of that construct (or factor) i.e. to test whether the data fit a hypothesized measurement model (Kline, 2011). Exploratory Factor

Analysis (EFA) is a statistical method used to uncover the underlying structure of a relatively large set of variables; and EFA is a technique within factor analysis whose overarching goal is to identify the underlying relationships between measured variables (Norris & Lecavalier, 2009).

Descriptive statistics were used to organize and summarize the demographic data. Means ranges, and standard deviations were calculated for the demographic variables. In this study, the demographic variables included gender, years working for the company, educational level, years working in current job position, previous training experience, and so forth. SPSS software was also used to input, code, and summarize the means, standard deviations, statistic value ( $z$ ) for skewness and kurtosis for each variable. For a normally-distributed variable, the skewness and kurtosis value ( $z$ ) is to be near zero (Hair et al., 2010). Skewness is a measure of symmetry, or more precisely, the lack of symmetry. A distribution, or data set, is symmetric if it looks the same to the left and right of the center point, whereas kurtosis is a measure of whether the data are peaked or flat relative to a normal distribution. The researcher also referred to Kline (2011) where the critical values ( $z$ ) for skewness and kurtosis should not exceed  $\pm 2.58$  and  $\pm 3.00$  respectively. In addition, inter-correlations between items were computed for further confirmation for linearity of the item distributions (Hair et al., 2010).

### **3.7.1 Assumptions of Structural Equation Modeling (SEM)**

#### **3.7.1.1 Multicollinearity**

Multicollinearity (also collinearity) in statistics, is a “*phenomenon in which two or more predictor variables in a multiple regression model are highly correlated*”, which means

that one can be linearly predicted from the other with a substantial degree of accuracy (Belsley, 1991). I have identified the absence of multicollinearity among the three (3) predictors which indicate low correlation among the three (3) factors or constructs. Table 3.3 shows the relationship among the predictor variables. The correlation coefficient value less than .90 is an indication that data were not affected by serious collinearity problems; in other words, the variables are not exactly the same (Hair et al., 2010). The results in Table 3.3 show that the three (3) variables are not the same or redundant. This is because their relationship is insignificant or less than .90.

**Table 3.3:** Correlation Coefficient Values

Variables	Mean	Standard Deviation	Pearson Correlation Analysis		
			SS	TM	TE
Soft Skills	3.5842	.30277	1	.067	.042
Training Methodology	4.0714	.41273	.067	1	.425*
Trainer's Effectiveness	4.6536	.30366	.042	.425*	1

### 3.7.1.2 Single Group Structural Equation Modeling (SEM)

The following discussion is on the Structural Equation Modeling (SEM) analytic procedure as addressed by Joreskog (1993), which is to test the model for the entire group (n = 260). This study has also applied two-step analyses which were the (1) Confirmatory Factor Analysis (CFA); and (2) Structural Equation Modeling (SEM) analysis.

## (1) Confirmatory Factor Analysis (CFA)

I have examined the measurement models relating to the soft skills (SS), '*time space learning*' - training methodology (TM), trainer's effectiveness (TE) and work performance (WP) items separately for the entire group (n = 260). This CFA method was to ensure the maximum extent to which the observed variables or items were to be generated by the underlying latent or hidden constructs. In other word, these analyses would provide the links between the latent variables and the observed variables. CFA is to test whether measures of a construct (items) are consistent with a researcher's understanding of the nature of that construct (or factor) or to test whether the data fit a hypothesized measurement model (Kline, 2011).

## (2) Structural Equation Modeling (SEM)

I have examined the relationships between the observed variables and the latent variables in a full model from two alternative models. The fit model was used in the analysis.

### Evaluating the Goodness-of-Fit

Besides that, I have estimated the overall model fit with three (3) types of measures which were: (i) *absolute model fit measures*; (ii) *increment fit indexes*; and (iii) *parsimonious fit measures*.

- (i) The *absolute model fit* measures included  $\chi^2$  statistics with  $p > 0.001$  (Hair et al., 2010). Root Mean Square Error of Approximation (RMSEA) with values  $< 0.08$

was deemed to be acceptable (Hair et al., 2010). Levesque et al. (2004) outline the values of  $< 0.05$  as a good fit,  $< 0.08$  as reasonable and  $> 0.10$  as poor fit.

- (ii) The *increment fit indexes*, which the researcher has referred to, were the Goodness-of-Fit Index (GFI) and Comparative-Fit-Index (CFI) with the value approaching 0.9 and above as a good fit model (Hair et al., 2010). Hoyle and Panter (1995) indicate the value of CFI of  $> 0.9$  as an acceptable fit, while  $> 0.8$  as marginally adequate.
- (iii) *Parsimonious fit* measures were referred as Normed chi-square;  $\text{CMIN}/df$  represented the chi-square statistics index (CMIN) divided by the degree of freedom ( $df$ ). Kline (2011) provides a value of  $< 3.0$  as an acceptable model fit.

### **The Structural Model Fit**

Once the parameters were estimated which concerned the identification of the items loaded on each of the factors in the measurement model, I then estimated the full latent structural model. The overall model fit was once again estimated upon which all the measures of goodness-of-fit were accomplished. The guideline of acceptable relationship was referred to the critical ratio (CR) with the  $t$ -value for one tailed test being 1.96 for the 0.01 significant level.

### **3.8 SUMMARY**

In summary, this chapter three discussed in detail the research design and methodology of the present study in order to answer the proposed research questions and test the hypotheses. It also described the respondents of the study, the measurement instruments, the variables, the methods and scales adopted in data collection as well as the data preparation and statistical procedures. The processes of data dissemination and collection were explained in detail. The reliability of the constructs and the validity of the instruments utilized were described also, using results from the pilot study.

## CHAPTER 4: RESULTS AND FINDINGS

### 4.1 INTRODUCTION

This chapter four provides the results of the data analysis that addresses the five (5) research questions of the present study. The first section provides a descriptive analysis, and it discusses the distribution of samples including a detailed breakdown of *gender*, *education level*, *age*, *race*, *position level*, *employment status*, and *marital status*. The second section presents the results of the measurement model for this research topic on “*The impact of soft skills training and development using time space learning on work performance.*” The third section presents the estimation of the full-fledged Structural Equation Modeling (SEM) based on the hypothesized model.

The results analysis is organized as: single group analysis CFA (Confirmatory Factor Analysis) and SEM (Structural Equation Modeling) from the whole samples of 260 trainees or respondents, who are employees from nine (9) different organizations (see Appendix-1: List of Participants’ or Respondents’ Organization).

The single group analysis CFA of the full-fledged SEM was guided by the following research questions and research hypotheses of this study:

- 1) Does the soft skills (SS) acquisition have a direct influence on work performance (WP)?

#### **Hypothesis-1:**

*Soft skills (SS) acquisitions directly influence employee work performance (WP).*

- 2) Does the training methodology (TM) have effect on the soft skills (SS) acquisition?

**Hypothesis-2:**

*Training Methodology (TM) has a positive impact on Soft Skills (SS) acquisitions.*

- 3) Does the soft skills (SS) acquisition mediate the relationship between training methodology (TM) and work performance (WP)?

**Hypothesis-3:**

*Soft Skills (SS) acquisitions mediate the relationship between Training Methodology (TM) and Work Performance (WP).*

- 4) Does the trainer's effectiveness (TE) have effect on the soft skills (SS) acquisition?

**Hypothesis-4:**

*Trainer's Effectiveness (TE) positively influences Soft Skills (SS) acquisition.*

- 5) Does the soft skills (SS) acquisition mediate the relationship between trainer's effectiveness (TE) and work performance (WP)?

**Hypothesis-5:**

*Soft Skills (SS) acquisitions mediate the relationship between Trainer's Effectiveness (TE) and Work Performance (WP).*

## **4.2 DESCRIPTIVE ANALYSIS**

This section provides the core information regarding the detailed breakdown of the distributions of samples and the composite reliability of the instruments.



#### 4.2.1 Data Screening

In this research study, I used population sampling (i.e., taking a subset of subjects that is representative of the entire population) whereby I obtained information from the specific target groups of trainees or participants who were employees from nine (9) different organizations (*private sectors, state government, government linked, and multinational companies*) based in Malaysia that went through the soft skills training program using the '*time space learning*' - training methodology. From a total population size of 806 employees at manager, executive and supervisory level from these nine (9) companies who had attended the soft skills training programs at different times and locations where the training was conducted; a total of 260 volunteered to participate in this research survey. For the total population of 800 to 850 employees, a sample size needed to be at least 260 for a 95 percent confidence level within .05 risk of sampling error (Krejcie & Morgan, 1970).

Hence, the total sample size included in the final analysis of this study, which is 260 employees or trainees or participants, is considered to be an appropriate sample size. Table 4.1 revealed the detailed demographic summary of the participants who had attended the soft skills training program from the identified employees from the nine (9) different organizations in Malaysia. See Appendix-1: List of Participants' (or Respondents) Organizations.

**Table 4.1:** Demographic Summary of Respondents (n=260)

<b>Demographic Variables</b>	<b>No. of Responses</b>	<b>Percent (%)</b>
<b><i>Gender</i></b>		
Male	<b>188</b>	<b>72.3</b>
Female	72	27.7
<b><i>Education</i></b>		
High school	26	10
Certificate	10	3.8
Diploma	39	15
<b>Graduate (Bachelor Degree)</b>	<b>166</b>	<b>63.8</b>
Postgraduate	16	6.2
Other	3	1.2
<b><i>Age</i></b>		
18–29 years old	48	18.5
<b>30–49 years old</b>	<b>182</b>	<b>70.0</b>
50–64 years old	29	11.2
65years old and above	1	0.4
<b><i>Race</i></b>		
<b>Malay</b>	<b>233</b>	<b>89.6</b>
Chinese	20	7.7
Indian	4	1.5
Others	3	1.2
<b><i>Executive or Manager</i></b>		
<b>Yes</b>	<b>220</b>	<b>84.6</b>
No	40	15.4
<b><i>Employment</i></b>		
<b>Fulltime</b>	<b>238</b>	<b>91.5</b>
Part time	17	6.5
On contract	5	1.9

**Table 4.1, continued**

<b><i>Marital</i></b>		
Single	49	18.8
<b>Married</b>	<b>190</b>	<b>73.0</b>
Separate	2	0.8
Divorced	16	6.2
Widowed	3	1.2

As shown in Table 4.1, the majority of the respondents are male (Male = 72.3%, Female = 27.7%). In terms of educational qualification, Table 4.1 also revealed that most of the respondents are bachelor degree holder (63.8%); and this is followed by diploma holder (15%). Only 6.2% have obtained postgraduate degrees. As for the age categories, the majority (70%) of the respondents are between 30-49 years old; followed by age group 18-29 years old (18.5%); and 50-64 years old (11.2%). Only one respondent is 65 years old and above (0.4%). Most of the respondents are holding executive and managerial positions in their respective organizations (84.6%). The remaining 15.4% are holding specific supervisory positions. Malay race constitute the majority of the respondents (89.6%); followed by Chinese 7.7%; Indian 1.5%; and the remaining 1.2% are other minority races. As for the nature of employment, 91.5% of them are full-time employees; this is followed by part-time 6.5% and contract 1.9%.

Further analysis from Table 4.2, revealed the descriptive statistics for all the selected twenty-three (23) items of the research model (*i.e., items that met content validity and reliability test from statistical computations*) from the whole sample (n = 260). The mean score from the 5-point Likert Scale ranged from 4.0115 to 4.6808; and the standard deviation from 0.64780 to 0.45783. The mean score of all variables (observed

and latent) are estimated in SEM by adding a *mean structure* to a model's basic *covariance structure* (i.e., its structural or measurement model) (Kline, 1998). The statistics values ( $z$ ) of skewness and kurtosis fell below the threshold point of  $\pm 3.0$  (Kline, 2011), showing they are normally distributed.

The coding abbreviation used in Table 4.2 (second column) for the variables used in this study are as follows: 'te' for *trainer's effectiveness*, 'tm' for *training methodology*, 'softk' for *soft skills*, and 'wp' for *work performance*; followed by the questionnaires number selected by SEM computation.

Section 4.2.2 details the corresponding questionnaires that belong to each coding specified in the second column of Table 4.2.

**Table 4.2:** Descriptive Analysis (*from SPSS*)

		N	Mean	Std. Deviation	Skewness		Kurtosis	
Item		Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
1	<i>te32</i>	260	4.6808	.49125	-1.073-	.151	-.162-	.301
2	<i>te31</i>	260	4.6615	.50563	-1.044-	.151	-.126-	.301
3	<i>te29</i>	260	4.6346	.52830	-1.031-	.151	-.025-	.301
4	<i>te28</i>	260	4.5538	.58371	-.916-	.151	-.149-	.301
5	<i>tm52</i>	260	4.4885	.57946	-.615-	.151	-.590-	.301
6	<i>te34</i>	260	4.4846	.57267	-.685-	.151	.202	.301
7	<i>softk15</i>	260	4.4346	.54130	-.179-	.151	-1.084-	.301
8	<i>softk9</i>	260	4.3692	.52927	.067	.151	-1.018-	.301
9	<i>wp61</i>	260	4.3385	.56341	-.121-	.151	-.698-	.301
10	<i>softk1</i>	260	4.3077	.58085	-.640-	.151	2.925	.301
11	<i>wp59</i>	260	4.2962	.55645	-.023-	.151	-.563-	.301
12	<i>softk20</i>	260	4.2885	.56049	-.037-	.151	-.533-	.301
13	<i>tm39</i>	260	4.2769	.54900	.038	.151	-.479-	.301
14	<i>tm44</i>	260	4.2654	.64780	-.320-	.151	-.712-	.301
15	<i>wp60</i>	260	4.2577	.56176	-.014-	.151	-.419-	.301
16	<i>tm50</i>	260	4.2038	.64633	-.394-	.151	.087	.301
17	<i>tm38</i>	260	4.2000	.56814	-.132-	.151	.398	.301
18	<i>softk17</i>	260	4.1808	.49125	.380	.151	.364	.301
19	<i>wp57</i>	260	4.1731	.50942	.258	.151	.288	.301
20	<i>softk21</i>	260	4.1346	.45783	.504	.151	1.130	.301
21	<i>softk24</i>	260	4.1115	.55495	.044	.151	.137	.301
22	<i>softk19</i>	260	4.0500	.49065	.119	.151	1.147	.301
23	<i>softk23</i>	260	4.0115	.55911	.004	.151	.237	.301

Referring to Table 4.2, all the work performance (*wp*) items have indicated the range of mean score from 4.1731 and 4.3385 in the 5-point Likert Scale. In addition, Table 4.2 shows that the range of the standard deviation for work performance was from 0.50942 to 0.56341; and the statistics values (*z*) of skewness and kurtosis were within the accepted limits (below  $\pm 3.0$ ).

Based on these results (see Table 4.2), the research model's variables items had reached above the overall mean of the anchor point value of 3.0 (the mean value range from 4.0115 to 4.6808 in the 5-point Likert Scale or the average mean or the cut-off point specified by the researcher) (Finstad, 2010). The range of standard deviation indicated a well dispersed variation of data (values range from 0.64780 to 0.45783). The statistics values ( $z$ ) for skewness and kurtosis were within the accepted limits (below  $\pm 3.0$ ); indicating that the items appeared to be normally distributed. In general, the instrument is highly reliable. This was supported by the composite reliability estimates which fell in the range from .736 to .802 (see Table 4.3), denoting acceptable measures of internal consistency as they are all above .7 in value (Pallant, 2003).

**Table 4.3:** Cronbach's Alpha & Composite Reliability Scores

Variables	Cronbach's alpha	Composite Reliability
Soft Skills (SS)	.97	.787
Trainer's Effectiveness (TE)	.87	.802
Training Methodology (TM)	.91	.736
Work Performance (WP)	.96	.744

Composite reliability is a measure of the overall reliability of a collection of heterogeneous but similar items (Raykov, 1997). In testing the individual item reliability, a traditional reliability measure namely Cronbach's alpha is being used; whereas composite reliability is being used to test the whole construct and the latent variables. From Table 4.3, the reliability estimates for internal consistency (using Cronbach's alpha) based on the four (4) variables for all individual items are: soft skills

(.97), trainer's effectiveness (.87), training methodology (.91) and work performance (.96). All the reliability values yield a value above .7, indicating that all the survey instruments tested achieved acceptable measures of internal consistency (Pallant, 2003). The composite reliability values (see Table 4.3) for the four (4) variables on the overall selected twenty-three (23) items derived from SEM are: soft skills (.787), trainer's effectiveness (.802), training methodology (.736) and work performance (.744), which again confirmed internal consistency as they are all above .7 in value.

#### 4.2.2 Single Group Analysis

For the single group, CFA and SEM analysis, the distribution of the final items was based on the sample size from all 260 trainees or participants from the nine (9) different organizations that are based in Malaysia.

##### a) Soft Skills (SS)

Altogether there are 25 questions on soft skill (SS) competencies (see Appendix-3) which were self-developed and adapted from different soft skills professional training programs; from the syllabus or curriculum covered in the training programs; and were backed by subject matter experts (professional trainers) with 30+ years of experiences and by literature review too. The selected nine (9) items (or questions), derived from SEM from the twenty-five (25) soft skills (SS) questionnaires being asked are:

**softk1** (*Get along well with others at all levels from top-to-bottom*);

**softk9** (*Willing to seek input from others - not having a mindset 'I'm always right'*);

**softk15** (*Is open-minded and can easily discuss things with*);

- softk17** (*Willing to take up new challenges and responsibilities - expand comfort zone*);
- softk19** (*Able to get 'willing' cooperation from staffs/others to get things done*);
- softk20** (*Treat staff/people with dignity & with respect – not criticizing & condemning*);
- softk21** (*Take initiative in carrying out day-to-day tasks/duties*);
- softk23** (*Demonstrate enthusiasm at workplace*); and
- softk24** (*Creative and/or innovative in implementing/executing daily task/activities*)

These nine (9) items (derived from SEM) tapped the dimension of soft skills learned and acquired by the trainees or employees during the training program period. These items also indicate the skills, behavior and attitude indicators (items) covered in the syllabus/curriculum of the soft skills training program during the training period. Furthermore, tapped in this dimension is the knowledge and skills of the training syllabus/curriculum that the trainer must have to effectively impart and motivate the trainees or participants. These selected items also contributed to the composite reliability of .787 (i.e., above .7) which shows internal consistency (see Table 4.3).

#### **b) Trainer's Effectiveness (TE)**

The trainer's effectiveness (TE) instrument consists of ten (10) items (see Appendix-5) which were self-developed and adapted from Kirkpatrick's training evaluation model. The selected trainer's effectiveness (TE) consist of five (5) items, derived from SEM from the ten (10)-item trainer's effectiveness questionnaires, namely:

- te28** (*Present the contents of the materials clearly and easy to understand*);
- te29** (*Give guidance and/or support throughout the training*);
- te31** (*Approachable and pleasant to ask questions and to deal with*);



**te32** (*Demonstrate confidence and willingness to coach/guide me*); and

**te34** (*Show the relevancy of the learning to the business/workplace*).

These five (5) items tapped the dimension of the trainer's effectiveness in delivering the soft skills training program to the trainees or participants. The items also indicate the expectation of trainees or participants from the trainer/facilitator during their participation in the training program. Furthermore, tapped in this dimension are the knowledge and teaching skills possessed by the trainer himself/herself. These items also contributed to the composite reliability of .802 (i.e., above .7) which shows internal consistency (see Table 4.3).

**c) Training Methodology (TM) – ‘Time Space Learning’**

The training methodology (TM) instrument consists of a sixteen (16)-item questionnaire (see Appendix-6) to test the effect of ‘time space learning’ - training methodology (TM) on the soft skills acquisition. The questionnaire was self-developed and adapted based on comparison of various training methodologies with Dale Carnegie's training processes and methodology that are being used since it started in 1912; and input from subject matter experts or professional trainers; and they were all validated too.

In the training methodology (TM) construct, five (5) items were selected, derived from SEM from the sixteen (16)-item questionnaire, and they were represented by:

**tm38** (*The ‘time space’ (or break) provided had significantly helped me to change myself more positively*);

- tm39** *(The ‘time space’ (or break) given to practice and apply what I had learned at my real workplace had made this training more relevant in achieving greater success in my job/career);*
- tm44** *(The ‘time space’ (or break) provided to practice and apply what I had learned at my real workplace contributes a lot in enhancing my personal leadership skills);*
- tm50** *(The ‘outstanding performance’ award recognition given to one individual from the progress reports sharing is a very good way to motivate me to apply and practice what I had committed to do);*
- tm52** *(Based on my experience, I would strongly recommend using ‘time space’ (or break) learning methodology in developing soft skills in a person, instead of conducting the training program in straight consecutive days without breaks to practice and apply).*

These five (5) items, derived from SEM represent the dimension of ‘*time space learning*’ - training methodology incorporated in conducting the soft skills training program. These items tapped the dimension of ‘*time space*’ or breaks given to trainees or employees during the training process for them to apply/practice/experiment the soft skills learned in the training program into their work in the real workplace environment. In addition, these items also tapped the dimension of the effectiveness of ‘*time space learning*’ – training methodology incorporated in the training process, which had helped the participants in acquiring the soft skills learned. All the five (5) items contributed to

the composite reliability of .736 (i.e., above .7) which shows internal consistency (see Table 4.3).

#### **d) Work Performance (WP)**

The work performance (WP) instrument contained eighteen (18) items fully adopted and validated from Griffin (2003). The selected four (4) items or questions, derived from SEM from the eighteen (18)-item questionnaire adopted from Griffin (2003) are as follows:

- wp57** (*Coped with changes to the way you have to do your core tasks*);
- wp59** (*Initiated better ways of doing your core tasks*);
- wp60** (*Come up with ideas to improve the way in which your core tasks are done*);
- wp61** (*Made positive changes to the way your core tasks are done*).

These four (4) items underline the dimension of the employees' or participants' work performance improvement on their job/work after each training session. The selected items also indicate the expectation of employees or participants from the trainer/facilitator, especially on the various methods and techniques used in delivering the soft skills training program that can be used at the workplace. Furthermore, tapped in this dimension is the behavioral change in the employees' or participants' attitude after applying what had been learned in the workplace during the '*time space*' or breaks in between each session, that resulted in work improvement after the training. These selected items also contributed to the composite reliability of .744 (i.e., above .7) which shows internal consistency (see Table 4.3).

It is important to note why only twenty-three (23) items out of seventy (70) items were being selected by SEM. Although those 70 items have been validated by subject matter experts (or expert judges), the experts only give opinions based on their expert judgement of items in each construct independently, and not on the whole research model. Whereas SEM looks at all the items of the whole constructs in the model, and not independently. SEM looks for loading factor on each item of the construct that are below the threshold value  $< 0.50$  for the items to be considered contributing to the construct (Kline, 2011). Anything less will not be selected. Thus, these 23 items that SEM had chosen fit the model of this study. However, this does not mean that the other 47 items not selected by SEM are wrong or not useful. These non-selected items or questions can still be used for further research; that of differing model for SEM to analyze to see if the data fits the new model to be studied.

In summary, these twenty-three (23) selected items, derived from SEM from the original seventy (70) items in total, had contributed to improving the statistics values ( $z$ ) of skewness and kurtosis, which were within the accepted limits (below  $\pm 3.0$ ). It can now be concluded that all the selected twenty-three 23 items fit the model and are appropriate for the CFA and SEM analysis to be carried out.

#### **4.2.3 Non-Response Bias Test**

To further give credibility to the quality of data obtained, it is imperative to conduct a non-response bias test. Non-response bias may occur in a typical statistical survey if the answers of respondents differ from the potential answers of those who did not answer. This can happen in survey sampling, where individuals chosen for the sample are

unwilling or unable to participate honestly in the survey. Hence, a non-response bias is the bias resulting when respondents differ in meaningful ways from non-respondents.

The test compares the responses obtained by the researcher from the first batch of respondents and the last batch. This is based on the principle that the late respondents share the same features with other elements in the population whose response or feedback will have hitherto (up to this time) provide similar or different experiences about the phenomenon under investigation (non-respondents). Thus, a comparison of responses along the two divides of the two groups provided an opportunity to have an idea of what the opinion of the non-respondents would have been if they had responded. In addition, this comparison helped to identify the effect indifference of respondents (which is usually synonymous with questionnaire survey) would have on the quality of data obtained.

In this study, the respondents were divided into two (2) groups: (i) the first cohort of trainees i.e. early respondents, and (ii) the second cohort of those that participated in the soft skills training program or later respondents. Majority of the respondents in the sample, or 182 (70.4%) responded to the questionnaire in the first cohort of the training program while the remaining 78 (29.6%) provided their feedback in the second cohort of the soft skills training as indicated in Table 4.4.

Precisely, an independent sample *t*-test was conducted to examine any likely non-response bias on both predictors and criterion measures – soft skills acquisition, trainer's effectiveness, training methodology (*'time space learning'*) and work performance. Table 4.4 shows the result of the independent sample *t*-test analysis.

**Table 4.4:** Results of Independent Sample *t*-Test of Non-Response Bias

Variables	Group/Batch	t-test for Equality of Means			
		t-value	p-value	95% Confidence Interval of the Difference	
				Lower	Upper
Soft Skill	Early response	-.017	.987	-.04809	.04727
	Late response				
Trainer's Effectiveness	Early response	-1.155	.249	-.08718	.02271
	Late response				
Training Methodology	Early response	.540	.589	-.14429	.25345
	Late response				
Work Performance	Early response	-.352	.725	-.17968	.12513
	Late response				
<b>NOTE:</b> n = 182 (Early response); n = 78 (Late response); $p < 0.05$ , Sig based on 2 tailed; Confidence intervals containing zero (i.e. negative lower bounds) are interpreted as not significant.					

As depicted in Table 4.4, the result of independent sample *t*-test showed no statistically significant ( $p < 0.05$ ) difference between the responses of the early respondents and the late respondents on the four (4) latent constructs used in this study. This result which is based on the equality of means, provides evidence that the data set used in this study is not vulnerable to non-response bias.

#### 4.2.4 Common Method Bias Test (CMB)

One of the simplest ways to test if common method bias (CMB) is of concern in this study is by using Harman's single factor score, in which all items (measuring latent variables) are loaded into one common factor. If the total variance for a single factor is less than 50%, it suggests that CMB does not affect the data, hence the results

(Podsakoff et al., 2003). Note that Harman's approach is to test for CMB, but not to control for CMB.

To evaluate the effect the data collection method has on the quality of data obtained, especially in a self-reported survey, it is often suggested to conduct a common method bias (CMB) test. Common method bias happens when the data collection instrument caused variations in responses rather than the actual pre-dispositions of the respondents that the instrument attempts to uncover (i.e., respondent response might be on something else that could have influenced them, instead of their actual experiences from the soft skills training program that contributes to their work performance). That is, the instrument introduces a bias, hence variances, which the researcher will be analyzing. Consequently, the results get contaminated by the 'noise' stemming from the biased instruments. To minimize the chances of CMB occurring, some steps were undertaken in this research. First, the questionnaire survey was written in a very simple and comprehensible language. Additionally, the respondents' anonymity as well as their right to participate or not participate in the survey was made clear. Respondents were assured that their responses would be kept in strict confidence and used for research purpose only. This study also assessed the prevalence of the common method bias (CMB) through Harman's single factor method. This method involved conducting an exploratory factor analysis (EFA) that constrained the number of factors to be extracted to one. Neither the orthogonal nor other item rotation methods were used. A data set is affected by CMB if the total variance extracted score exceeds the 50 percent threshold (Podsakoff et al., 2003). The Harman method results indicated that when all the items in the data set were constrained to a single factor, only about 12.787 percent of the total variance was explained (see Table 4.5). It is therefore concluded that data obtain for this study is not affected by a common method bias (CMB).

**Table 4.5:** Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.941	12.787	12.787	2.941	12.787	12.787
2	1.504	6.541	19.328			
3	1.402	6.096	25.423			
4	1.375	5.980	31.403			
5	1.313	5.708	37.111			
6	1.242	5.398	42.509			
7	1.181	5.136	47.645			
8	1.092	4.749	52.394			
9	1.075	4.672	57.067			
10	1.056	4.591	61.657			
11	.970	4.219	65.876			
12	.939	4.082	69.959			
13	.870	3.784	73.742			
14	.845	3.672	77.415			
15	.804	3.495	80.910			
16	.756	3.286	84.196			
17	.741	3.224	87.419			
18	.681	2.962	90.381			
19	.646	2.807	93.188			
20	.618	2.687	95.875			
21	.454	1.976	97.851			
22	.320	1.393	99.244			
23	.174	.756	100.000			
<b>Extraction Method:</b> Principal Component Analysis (PCA)						

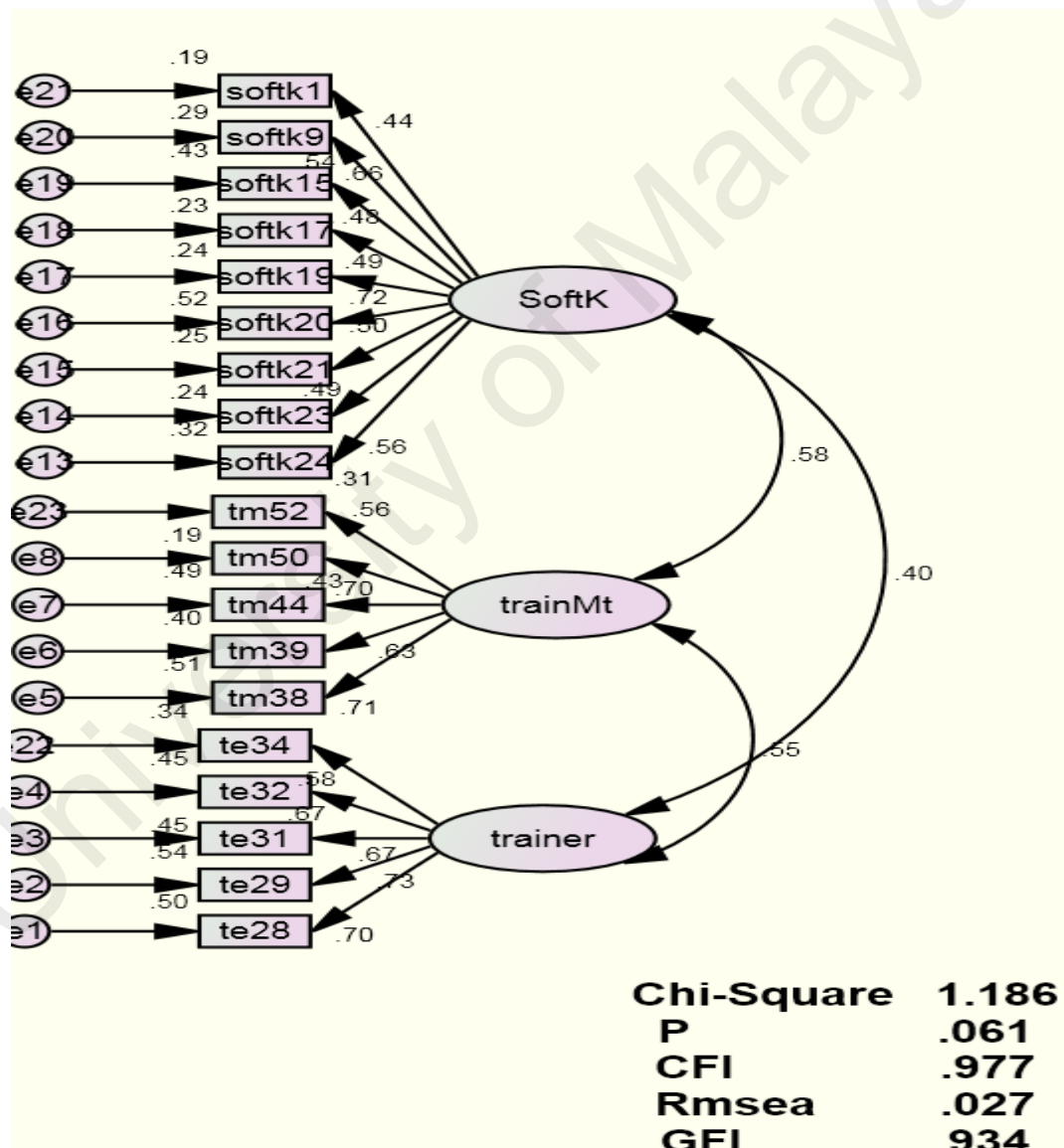
As shown in Table 4.5, Harman's single factor test is one technique to identify common method variance. The exploratory factor analysis (EFA) was conducted to examine the unrotated factor solution to determine the number of factors necessary to account for the variance in the variables. If a single factor emerges or one general factor will account for the majority of the covariance among the measures, then it is concluded that a substantial amount of common method variance is present. In this study, the exploratory method shows the maximum one factor would account for is 12.787 percent (< 50%) of



the total variance of all the predictors. Therefore, the data in this study is not in any way influenced by common factor bias error.

### 4.3 TESTING THE FACTORIAL VALIDITY

Based on the results of the reliability analysis in the previous section, the research model (conceptual framework) questionnaires represented schematically as a 3-factor measurement model.



**Figure 4.1:** The 3-Factors Measurement Model for SS, TM & TE

#### 4.3.1 Hypothesized 3-Factors Measurement Model

The initially hypothesized measurement model is presented in Figure 4.1. It was a first order of Confirmatory Factor Analysis (CFA) designed to test the multi-dimensionality of the research model (conceptual framework); and representing the two-step Structural Equation Modeling (SEM) analysis. Specifically, it tested the hypothesis that the multi-dimensionality construct of the research model, consisting of the soft skills ('softK') acquisition, trainer's effectiveness ('trainer') and training methodology ('trainMt').

I have also searched for offending estimates upon which the measurement was free from the negative error variances; standardized coefficients exceeding 1.00; extreme values of standard errors; and the residuals greater than 2.58. After a series of confirmatory factory analysis (CFA), only nineteen (19) items were selected and thirty- three (33) items were deleted.

The hypothesized model (see Figure 4.1) incorporates the three (3) inter-correlated factors i.e. soft skills ('softK') acquisition, trainer's effectiveness ('trainer') and training methodology ('trainMt') with a total of nineteen (19) observed variables:

- soft1**     *(Get along well with others at all levels from top-to-bottom);*
- soft9**     *(Willing to seek input from others - not having a mindset 'I'm always right');*
- soft15**    *(Is open-minded and can easily discuss things with);*
- soft17**    *(Willing to take up new challenges and responsibilities - expand comfort zone);*
- soft19**    *(Able to get 'willing' cooperation from staffs/others to get things done);*
- soft20**    *(Treat staffs/people with dignity & with respect – not criticizing & condemning);*
- soft21**    *(Take initiative in carrying out day-to-day tasks/duties);*

- soft23** (*Demonstrate enthusiasm at workplace*); and
- soft24** (*Creative and/or innovative in implementing/executing daily task/activities*)
- te28** (*Present the contents of the materials clearly and easy to understand*);
- te29** (*Give guidance and/or support throughout the training*);
- te31** (*Approachable and pleasant to ask questions and to deal with*);
- te32** (*Demonstrate confidence and willingness to coach/guide me*); and
- te34** (*Show the relevancy of the learning to the business/workplace*).
- tm38** (*The ‘time space’ (or break) provided had significantly helped me to change myself more positively*);
- tm39** (*The ‘time space’ (or break) given to practice and apply what I had learned at my real-workplace had made this training more relevant in achieving greater success in my job/career*);
- tm44** (*The ‘time space’ (or break) provided to practice and apply what I had learned at my real workplace contributes a lot in enhancing my personal leadership skills*);
- tm50** (*The ‘outstanding performance’ award recognition given to one individual from the progress reports sharing is a very good way to motivate me to apply and practice what I had committed to do*);
- tm52** (*Based on my experience, I would strongly recommend using ‘time space’ (or break) learning methodology in developing soft skills in a person, instead of conducting the training program in a straight consecutive day without breaks to practice and apply*).

Each observed variable was hypothesized to load onto only one factor. The error associated with each of the 19 variables, was postulated (or assumed) to be uncorrelated. These errors or uniqueness include measurement errors and specificity. I

had assessed the hypothesized model to determine to what extent the model fit the sample data. With regard to model adequacy, the results indicated a model fit with non-significant Normed Chi-Square statistics,  $\chi^2/df = 1.186$  which is less than the threshold value of 3.00  $p = 0.061(p > .0001)$ ; and RMSEA = 0.027 (Root Mean Square Error of Approximation); GFI = 0.934 (Goodness-of-fit statistic); and CFI = 0.977 (Comparative Fit Index) respectively. Model fit is whereby that model best represents the data using certain fit indices and Chi-Square value is one way to evaluate overall model fit (Hooper, Coughlan, & Mullen, 2008). The relative chi-square or normed chi-square, where the chi-square fit index was divided by the degree of freedom (CMIN/df) was estimated to be 1.186; which fell below the threshold point of 3.00 (Kline, 2011). Once the model had been accessed, I then evaluated the individual parameters or specifically the factor loadings.

**Table 4.6:** Model Parameters - Standardized Data (3-Constructs)

			Estimate	S.E.	C.R.	<i>p</i>	Label
SoftK	<---	trainer	.210	.056	3.206	.001	par_20
SoftK	<---	trainMt	.490	.069	5.580	***	par_21
WorkP	<---	SoftK	.770	.138	6.945	***	par_22

I then examined the feasibility of the individual parameter estimates. Referring to the standardized data solutions presented in Figure 4.1, the factor loadings range from 0.44 (softk1) to 0.71 (tm38). Note that factor loadings represent how much a factor explains a variable in factor analysis. Loadings close to -1 or 1 indicate that the factor strongly affects the variable. Loadings close to zero (0) indicate that the factor has a weak effect on the variable. The items or observed variables specified to measure a common underlying factor were found to be all reasonably and statistically significant (C.R >

1.96) (see Table 4.6 Model Parameters - Standardized Data). All the factors do not really fulfill the requirement for convergent validity, as some of the factors are below 0.50, but not exceeded more than 1.00.

Based on the squared multiple correlations, (see Figure 4.1) results of soft skills acquisition factors explained that; 19.1% of the variance associated with softk1 i.e. softk1 (19.1%); followed by softk9 (29.3%), softk15 (43.3%), softk17 (23.0%), softk19 (23.7%), softk20 (51.8%), softk21 (24.6%), softk23 (23.5%) and softk24 (31.8%). As per Figure 4.1, the factor loading of trainer's effectiveness explained that 33.9% of the variance associated with te34 i.e. te34 (33.9%); followed by te32 (44.7%), te31 (44.6%), te29 (53.9%), and te28 (49.6%). The training methodology ('*time space learning*') factor loading was explained by 31.4% of the variance associated with tm52 i.e. tm52 (31.4%); tm50 (18.8%); followed by tm44 (48.7%), tm39 (39.7%), and tm38 (50.7%). The results have demonstrated that all the factor loadings were statistically significant being considerably moderate (32.4%) to good predictors (43.7% and above).

As per Figure 4.1, the latent factor correlations were significant and positively correlated; with  $r = .40$  (*soft skills acquisition <--> trainer's effectiveness*) i.e. there is 40% relationship between soft skills acquisitions and trainer's effectiveness; and  $r = .58$  (*soft skills acquisition <--> training methodology*) i.e. there is 58% relationship between soft skills acquisitions and training methodology; and  $r = .55$  (*training methodology <--> trainer's effectiveness*) i.e. there is 55% relationship between training methodology and trainer's effectiveness. All the  $t$  values for the obtained covariances fell above critical value of the statistically significant of 0.01 (C.R. > 1.96), supporting the evidence of discriminant validity upon which the factors were independent, and yet moderately correlated.

#### 4.3.1.1 Convergent and Divergent (or Discriminant) Validity of Measurement Model

Convergent validity is to test if constructs that are expected to be related or correlated are, in fact, related or correlated, whereas discriminant validity (or divergent validity) tests constructs that should have no relationship, in fact, do not have any relationship (Sekaran, 2003). Convergent validity together with divergent or discriminant validity is a subtype of construct validity.

The convergent and divergent validity of the measurement model were examined. The convergent validity of the measurement model can be assessed by the Average Variance Extracted (AVE) and Composite Reliability (CR) (Fornell-Larcker, 1981). As could be seen in Table 4.7, while our model exhibited a relatively low convergent validity for the three (3) constructs in the CFA mode, evidence of divergent (or discriminant) validity has been well established in results of the analysis. The measurement adequacy in terms of divergent validity is established based on several conditions. For convergent validity of the model loading or the parameter estimate of each construct must be greater than 0.7 (Fornell-Larcker, 1981). In addition, the Average Variance Extracted (AVE) (see Figure 4.2) for each latent construct must be greater than 0.5 (Bagozzi et al., 1991). As for discriminant validity, AVE needs to be more than both - Maximum Shared Square Variance (MSV) and Average Shared Square Variance (ASV).

$$\frac{(\sum \text{Standardized Loading})^2}{(\sum \text{Standardized Loading})^2 + \sum \text{Measurement Error}}$$

Squared Multiple Correlation Estimate

**Figure 4.2:** AVE (Average Variance Extracted)

**Table 4.7:** Test of Convergent Validity of the Model

Calculation of AVE						
	Soft Skills		Training Methodology		Trainer's Effectiveness	
		loading <sup>2</sup>		loading <sup>2</sup>		loading <sup>2</sup>
loading1 <sup>2</sup>	0.440	0.194	0.560	0.314	0.580	0.336
loading2 <sup>2</sup>	0.660	0.436	0.430	0.185	0.670	0.449
loading3 <sup>2</sup>	0.480	0.230	0.700	0.490	0.670	0.449
loading4 <sup>2</sup>	0.490	0.240	0.630	0.397	0.730	0.533
loading5 <sup>2</sup>	0.720	0.518	0.710	0.504	0.700	0.490
loading6 <sup>2</sup>	0.500	0.250				
loading7 <sup>2</sup>	0.490	0.240				
loading8 <sup>2</sup>	0.560	0.314				
loading9 <sup>2</sup>	0.310	0.096				
SUM $\sum$ (loading <sup>2</sup> )		2.518		1.890		2.257
1-loading1 <sup>2</sup>		0.806		0.686		0.664
1-loading2 <sup>2</sup>		0.564		0.815		0.551
1-loading3 <sup>2</sup>		0.770		0.510		0.551
1-loading4 <sup>2</sup>		0.760		0.603		0.467
1-loading5 <sup>2</sup>		0.904		1.000		1.000
1-loading6 <sup>2</sup>		-1.518				
1-loading7 <sup>2</sup>		0.194				
1-loading8 <sup>2</sup>		0.436				
1-loading9 <sup>2</sup>		0.230				
SUM $\sum$ (1-loading <sup>2</sup> )		3.804		3.615		3.233
AVE		0.398		0.378		0.451

#### 4.3.1.2 Test of Convergent Validity

A few of the measures employed for convergent validity consist of the reliability of each item, AVE, and composite reliability as suggested by Bagozzi et al. (1991) and Fornell and Larcker (1981). Table 4.7 summarizes the model results of the convergent validity. The AVE must be at least 0.50, and the composite reliability should exceed 0.60 (Bagozzi et al., 1991). Composite reliability of this measurement model, however, was more than the suggested value (0.60) for all latent; so, the model appears to possess adequate convergent validity.

Also, the average variance extracted (AVE) of all the constructs are less than 0.5, except for trainer's effectiveness (TE) which is approximately 0.5 (i.e. AVE = 0.451). A condition necessary for convergent validity is that Average Variance Extracted (AVE) for each construct must equal or exceed 0.5. This means that although each item loaded on the expected construct, the contribution of all the loadings to the underlying factor (*Soft Skill, Training Methodology, and Trainer's Effectiveness*) may be relatively adequate but not sufficient.

#### 4.3.1.3 Test of Divergent (or Discriminant) Validity

From Table 4.8 it can be noted that the square root of the AVE for a given construct is greater than the absolute value of the standardized correlation of the given construct with any other construct in the analysis ( $AVE > \text{correlation}^2$ ) (Fornell & Larcker, 1981). Fornell and Larcker (1981) proposed a method for evaluating the divergent or discriminant validity. They suggested that if the correlation or shared variance (SV) between two composite constructs was not higher than their respective AVE estimation,



then discriminant validity existed. Based on Table 4.8, it can be noted that the square root of the AVE for a given construct is larger than the absolute value of the standardized correlation of the given construct with any other construct in the analysis [(AVE > correlation<sup>2</sup>)] (Fomell & Larcker, 1981).

**Table 4.8:** Test of Divergent (or Discriminant) Validity

AVE versus SV					
Latent Factors	Soft Skills	Training Methodology	Trainer's Effectiveness		
Soft Skills	0.398	<b>0.336</b>	<b>0.194</b>	1	AVE > 0.50
Training Methodology	0.580	0.378	<b>0.303</b>	2	AVE > SV
Trainer's Effectiveness	0.440	0.550	0.451		
<b>Legend</b>	<b>r</b>	<b>AVE</b>	<b>SV</b>		
Adequate Support for: (1) Convergent Validity, and (2) Discriminant Validity					

**NOTE:**

\*\*Correlation is significant at the 0.05 level (2-tailed). CR: Construct Square Root of AVE

#### 4.3.1.4 Results of Convergent and Divergent (or Discriminant) Validity

The average variance extracted (AVE) of all the constructs are greater than the shared variance (SV). All the Critical Ratio (CR) absolute values of the standardized correlation of the given constructs exceed 1.96 and the Average Variance Extracted (AVE) > SV, a condition necessary for discriminant validity. The implication of this is that each item loaded on the expected construct and as such, the items can conveniently identify differences among the latent variables. Thus, it can be asserted that each construct is distinct from each other (evidence of discriminant validity). However, evidence of convergent validity for all the three (3) latent constructs in the measurement

model was not perfectly established as expected. Only one (i.e. Trainer's Effectiveness) of the three constructs in the measurement model relatively met the established condition of  $AVE > 0.5$ . Notwithstanding, we still progressed with the analysis to the examination of structural model. Table 4.9 provides the summary of both discriminant and convergent validity.

**Table 4.9:** Results of Convergent and Discriminant Validity

Latent Constructs	AVE	MSV	ASV
Soft Skills	0.398	0.580	0.440
Training Methodology	0.378	0.580	0.550
Trainer's Effectiveness	0.451	0.550	0.440

**NOTE:** CR: Critical ratio, AVE: Average Variance Extracted, MSV: Maximum Shared Square Variance, ASV: Average Shared Square Variance.

In summary, the hypothesized measurement model in Figure 4.1 provides a reasonable explanation of the research model used in this study, with three (3) inter-correlated factors and nineteen (19) measured variables. Hence, it can be claimed that the research model (conceptual framework) is a multi-dimensional construct consisting of soft skills acquisition, trainer's effectiveness and training methodology (*'time space learning'*). In general, the three (3) factors (soft skills acquisition, trainer's effectiveness and training methodology – (*'time space learning'*)) only managed to fulfill one layer of the construct validity, which is discriminant validity (correlations among factors of less than 0.85) and acceptable reliability (Cronbach's alpha of above .7). Factor correlations were of a moderate size.

Further testing on convergent and divergent (or discriminant) validity shows that the measurement model exhibits a relatively low convergent validity for the three (3) constructs in the CFA mode since the average variance extracted (AVE) of all the constructs are less than 0.5 except for trainer's effectiveness which is approximately 0.5. AVE value for each construct must be equal or more than 0.5 (Bagozzi & Yi, 1991), a condition necessary for convergent validity. Evidence of divergent or discriminant validity has been well established from the results analysis whereby the AVE of all the constructs are greater than the share variances (SV) (from Table 4.8), a condition necessary for discriminant validity.

#### **4.3.2 Hypothesized 1-Factor Measurement Model**

The model depicted in Figure 4.3 represented a one (1) factor model of employees' work performance with four (4) observed variables:

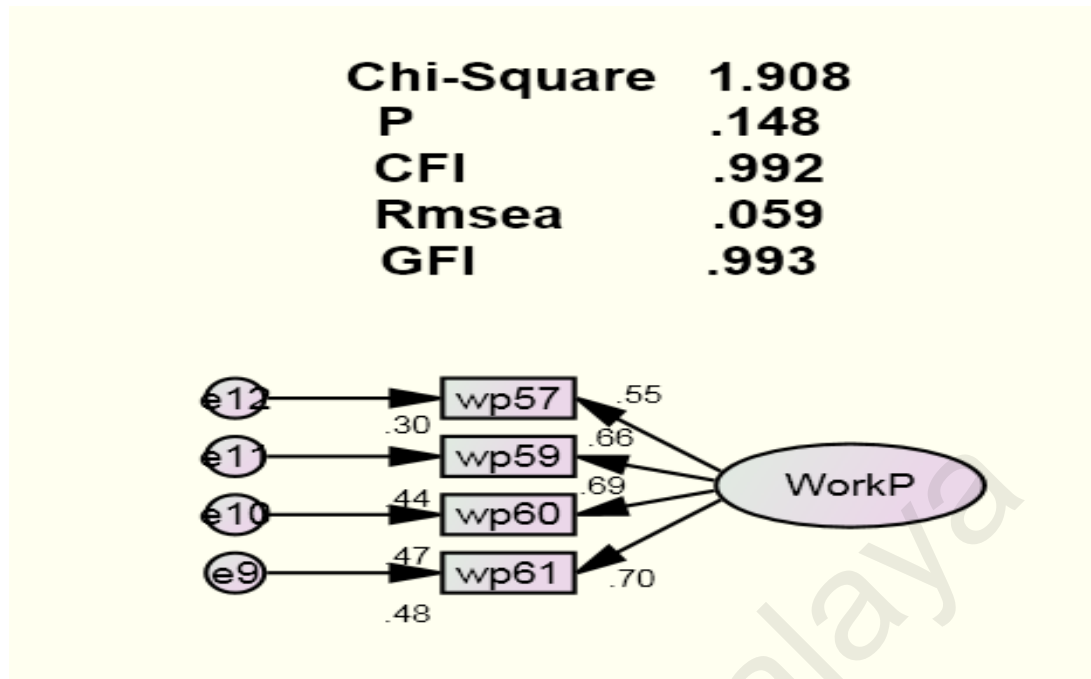
**wp57** (*Coped with changes to the way you have to do your core tasks*);

**wp59** (*Initiated better ways of doing your core tasks*);

**wp60** (*Come up with ideas to improve the way in which your core tasks are done*);

**wp61** (*Made positive changes to the way your core tasks are done*).

The error variables or uniqueness associated with the variables were assumed to be uncorrelated. This model (see Figure 4.3) was seen to represent performance of employees at work after going through soft skills training program.



**Figure 4.3:** The 1-Factor Measurement Model for WP

The model in Figure 4.3, has satisfied the non-significant value with the Normed Chi-Square statistical test  $\chi^2/df=1.908$  i.e. less than the threshold value of 5.00  $p = 0.061(p >.0.001)$ ; and also below the threshold point of 3.000 (Kline, 2011) thus, indicating a model fit. The other modification indexes have revealed acceptable model fit with GFI = 0.993 (Goodness-of-fit statistic); CFI = 0.992 (Comparative Fit Index); and RMSEA = 0.059 (Root Mean Square Error of Approximation). In general, the results were generally favorable. These results indicated that this model can be represented by one factor provided the individual parameter estimates were viable and statistically significant. Further investigation on the feasibility of the individual parameter estimates has found that, with respect to the standardized solution, the estimates of the measurement model with standard errors were all reasonably and statistically significant at the level of 0.01 (CR > 1.96).

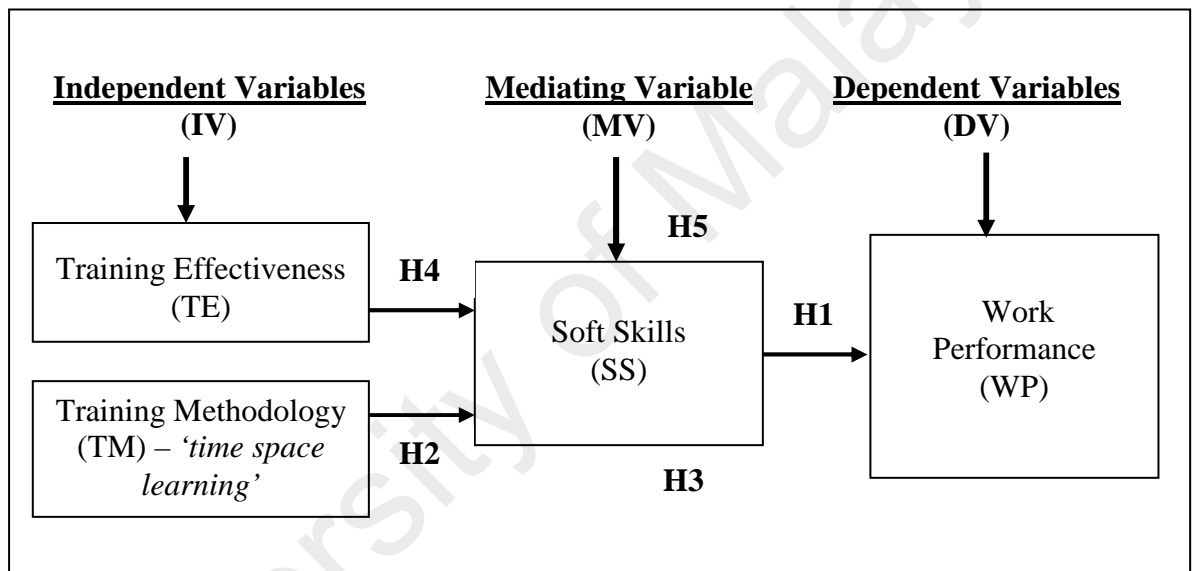
Despite the significant loadings, the employees' work performance item loadings varied considerably as to the degree to which they explained the factor. The factor loadings were all within the limits: wp57 (0.55), wp59 (0.66), wp60 (0.69) and wp61 (0.70) and the error variances were all below 1.00. Based on the squared multiple correlations, the employees' work performance factor explained 30.4% of the variance associated with wp57; indicating a relatively moderate relationship between the item and its factor. The work performance factor explained 43.6% of the variance associated with wp59; indicating a moderate relationship with its factor. The work performance factor also explained 40.7% for wp60 and 50.3% for wp61 which also indicates a moderate relationship with its factor. From Figure 4.3, the items wp57 ( $R^2 = 0.550$ ); wp59 ( $R^2 = 0.663$ ); wp60 ( $R^2 = 0.690$ ); and wp61 ( $R^2 = 0.701$ ); were all considered to be a strong predictor to the factor.

In summary, the hypothesized measurement model in Figure 4.3 provides a reasonable explanation of employees' work performance used in this study. With its four (4) measured variables and four (4) variances of errors; this research model supported the hypothesis that employees' work performance was a unidimensional construct. All the factor loadings strongly defined their respective factors.

#### **4.4 TESTING THE VALIDITY OF THE FULL-FLEDGED LATENT VARIABLE MODEL**

This model indicates one predictor (*soft skills (SS) acquisition*) of managers and executives in an organization. Trainer's effectiveness (TE) and training methodology – 'time space learning' (TM) directly influenced soft skills (SS) acquisition; but indirectly affects work performance (WP) via soft skills (SS) acquisition. Despite the fact that

soft skills (SS) acquisition might strongly affect employees' work performance (WP); it would require a good trainer and appropriate training methodology to jointly influence the extent to which employees can actually assimilate and execute the soft skills (SS) learned, and subsequently translate it to a culture that leads to efficient organizational productivity. I have assumed that the constructs of trainer's effectiveness, training methodology, soft skills acquisition and employees' work performance might interact with each other (see Figure 4.4).



**Figure 4.4:** Hypothesized Conceptual Framework Model

This hypothesized model (Figure 4.4) was positioned based on the findings by Jacobs (2003) where work performance was reported to be influenced by many different factors namely *incentives, remuneration, job satisfaction, the training program subjects delivered to the trainees, training methodology used, trainer's effectiveness, and so forth*. This was further supported by Farah et al. (2009) who revealed that memory formation is highly sensitive not only to the total amount of training, but also to the *pattern of trials* (experiment and experience) used during training.

#### **4.4.1 Validating the Structural Equation Modeling (SEM) for the Proposed Model**

Based on the prior results of the measurement models using the confirmatory factor analysis (CFA) as depicted in Figure 4.1 and Figure 4.3, I have formulated a full-fledged latent variable of the relationships between the research model variables and work performance. I adopted one hypothesized model with no competing models based on the results of previous literature and research. This step of analysis was directed to answer the entire research questions (RQ) formulated for this study, that is:

- 1) Does the soft skills (SS) acquisition have a direct influence on work performance (WP)?
- 2) Does the training methodology (TM) have effect on the soft skills (SS) acquisition?
- 3) Does the soft skills (SS) acquisition mediate the relationship between training methodology (TM) and work performance (WP)?
- 4) Does the trainer's effectiveness (TE) have effect on the soft skills (SS) acquisition?
- 5) Does the soft skills (SS) acquisition mediate the relationship between trainer's effectiveness (TE) and work performance (WP)?

In general, the hypotheses needed to be confirmed is:

H<sub>A</sub>: The structural research model fit the data.

This study explained the hypotheses that the structural research model fit the data. The model evaluates the path relationships to answer the following five (5) hypotheses:

**Hypothesis-1 (H1):**

*Soft skills (SS) acquisitions directly influence employee work performance (WP).*

**Hypothesis-2 (H2):**

*Training Methodology (TM) has a positive impact on Soft Skills (SS) acquisitions.*

**Hypothesis-3 (H3):**

*Soft Skills (SS) acquisitions mediate the relationship between Training Methodology (TM) and Work Performance (WP).*

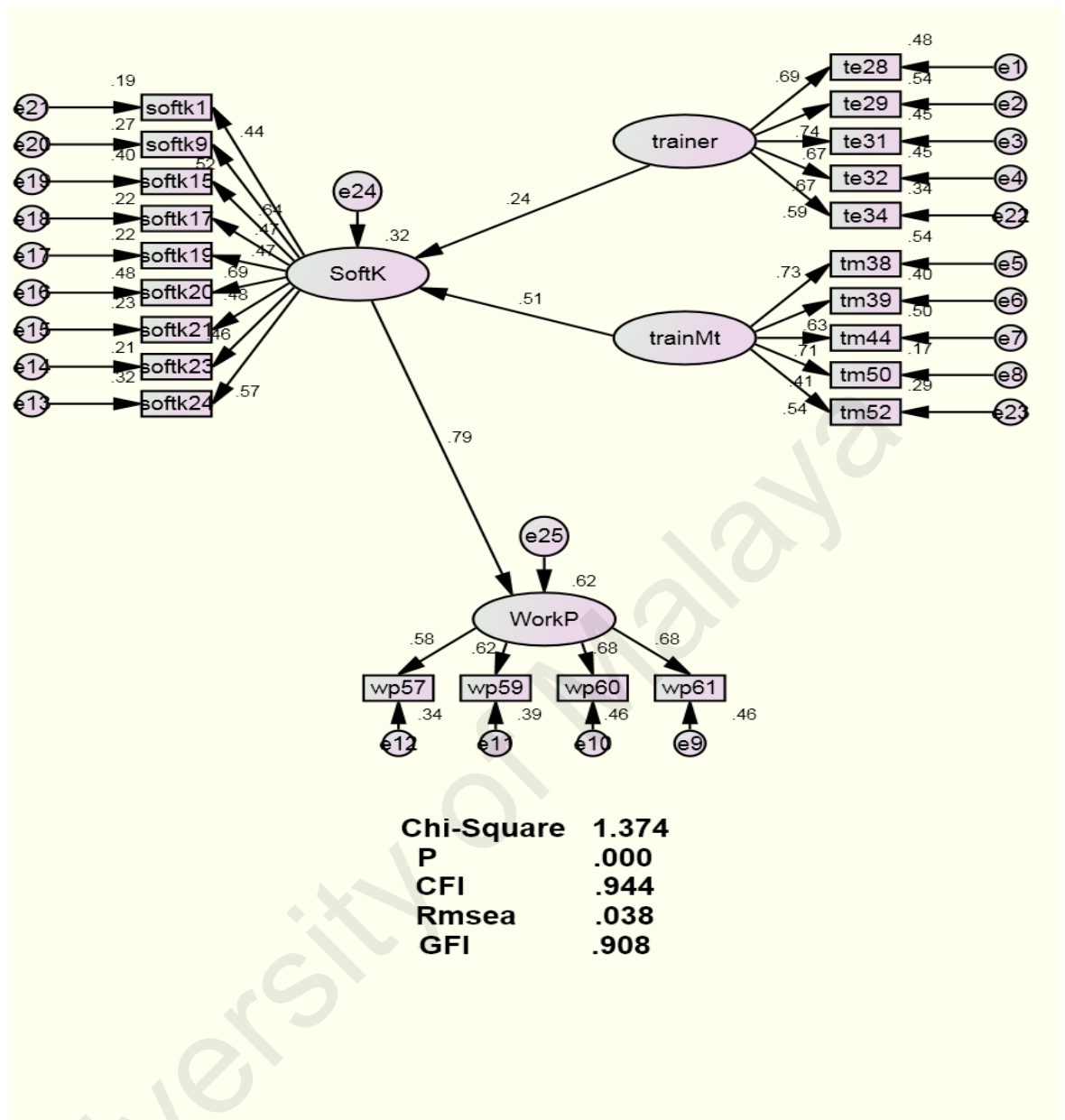
**Hypothesis-4 (H4):**

*Trainer's Effectiveness (TE) positively influences Soft Skills (SS) acquisition.*

**Hypothesis-5 (H5):**

*Soft Skills (SS) acquisitions mediate the relationship between Trainer's Effectiveness (TE) and Work Performance (WP).*





**Figure 4.5:** Hypothesized Model by SEM

#### 4.4.2 Analysis of Hypothesized Model by SEM

With regard to model adequacy, the results (from Figure 4.5) had revealed an acceptable model fit with non-significant Normed-Chi-Square statistical test,  $\chi^2/df = 1.374$ ; GFI = 0.908 (Goodness-of-fit statistic); CFI = 0.944 (Comparative Fit Index); and RMSEA = 0.038 (Root Mean Square Error of Approximation). The relative chi-square or normed

chi-square where the chi-square fit index is divided by the degree of freedom (CMIN/df) which was estimated to be 1.374 fell below the threshold point of 3.000 (Kline, 2011). Therefore, these results satisfied the general hypothesis that the structural research model fitted the data. Due to the fit model, the individual parameters were evaluated further and three (3) specific hypotheses of the path relationships were then estimated (see Figure 4.5).

**Table 4.10:** Model Parameters (*Standardized Data*)

Items			Estimate ( <i>Standardized</i> )	S.E. ( $R^2$ )	C.R.	$p$	Label
SoftK	<---	trainer	.210	.056	3.206	.001	par_20
SoftK	<---	trainMt	.490	.069	5.580	***	par_21
WorkP	<---	SoftK	.770	.138	6.945	***	par_22
te28	<---	trainer	1.000				
te29	<---	trainer	.962	.100	9.626	***	par_1
te31	<---	trainer	.844	.093	9.037	***	par_2
te32	<---	trainer	.814	.091	8.992	***	par_3
tm38	<---	trainMt	1.000				
tm39	<---	trainMt	.830	.098	8.480	***	par_4
tm44	<---	trainMt	1.100	.119	9.208	***	par_5
tm50	<---	trainMt	.636	.111	5.735	***	par_6
wp61	<---	WorkP	1.000				
wp60	<---	WorkP	.990	.114	8.659	***	par_7
wp59	<---	WorkP	.907	.111	8.154	***	par_8
wp57	<---	WorkP	.776	.101	7.716	***	par_9
softk24	<---	SoftK	1.000				
softk23	<---	SoftK	.828	.137	6.021	***	par_10
softk21	<---	SoftK	.703	.113	6.195	***	par_11
softk20	<---	SoftK	1.223	.154	7.948	***	par_12
softk19	<---	SoftK	.737	.121	6.091	***	par_13
softk17	<---	SoftK	.735	.121	6.075	***	par_14
softk15	<---	SoftK	1.092	.144	7.558	***	par_15
softk9	<---	SoftK	.873	.133	6.546	***	par_16
softk1	<---	SoftK	.817	.141	5.781	***	par_17
te34	<---	trainer	.831	.103	8.042	***	par_18
tm52	<---	trainMt	.745	.101	7.364	***	par_19

Referring to Table 4.10, all the factor loadings were of statistical significance at the 0.01 level ( $CR > 1.96$ ). The values were in the range of moderate loading for item tm50 (standardized estimate was 0.636 and  $R^2 = 0.111$ ); to high loadings for item te29 (standardized estimate was 0.962 and  $R^2 = 0.100$ ). All the variances of the errors are significant ( $CR > 1.96$ ).

### **Hypothesis-1: (H1)**

*Soft skills (SS) acquisition directly influences work performance (WP)*

Table 4.10 reveals that the soft skills (SoftK) acquisition significantly influenced employees' work performance (WorkP) by a standardized direct effect of .77 ( $CR > 1.96$ ) and un-standardized direct effect of .79 (see Figure 4.5). This means that soft skills acquisition directly influence work performance by 79% (or 77% using standardized data). Work performance was explained by its predictor namely soft skills acquisition by 62% (see Figure 4.5).

### **Hypothesis-2: (H2)**

*Training methodology (TM) has a positive impact on soft skills (SS) acquisition*

The effects of the training methodology ('time space learning') on soft skills acquisition was found to be significant ( $CR > 1.96$ ); with a moderate positive value of coefficient .51 un-standardized direct effect (see Figure 4.5); and .49 standardized direct effect (see Table 4.10). In other words, training methodology ('time space learning') has a moderate positive impact on soft skills acquisition by 51% (or 49% using standardized data).

#### **Hypothesis-4: (H4)**

*Trainer's effectiveness (TE) positively influence soft skills acquisition (SS)*

Figure 4.5 reveals that the causal relationship between trainer's effectiveness (trainer) and soft skills (SoftK) acquisition was significant ( $CR > 1.96$ ); with the un-standardized direct effect of 0.24 and standardized direct effect of 0.21 (Table 4.10). Thus, trainer's effectiveness does have a positive influence on soft skills acquisition by 24% (or 21% using standardized data). Soft skills (SoftK) acquisition can be explained by 32% of its predictor, trainer's effectiveness (trainer) (see Figure 4.5).

Despite the small positive influence of only 24% (21% using standardized data) from the TE on SS acquisition, the general written comments from the participants extracted from the survey form indicated a very significant satisfaction from the participants. This shows that the trainer had done a very good job and had contributed to the participants' acquisition of the SS learned for WP enhancement.

In addition to the ten (10) items asked in the TE instruments, written general comments about the trainer's effectiveness were also captured in the questionnaires on question no.11 (see Appendix 5).

Following are some examples of comments written and captured in these trainer's effectiveness (TE) questionnaires: *(In general, all the comments written and captured in the survey forms were all positive and encouraging with few exceptions suggesting to improve the training materials; training aids; and to increase the number of training days but none commented negatively on the trainer's skills & competencies.)*

1. *"It was a great training and it made my habit change and come out from my comfort zone. Very good trainer and he gave a lot of interesting examples related to the working environment."*
2. *"Quite enjoy & have fun during this training. The trainer is super good in order to practice presentation skills & confidently. And I was happy that he can even remember all of the names of members."*
3. *"His presentations skill was very impressive and it was clear for me to understand. He also taught us the presentation skill and tips. It is very useful in our work situation. Thank you very much."*
4. *"Great trainer and energetic. A well develop program conducted and lead by one of the best trainer in town."*
5. *"Great job! And hardest to get opportunity to learn this, and I'm glad I attended this course. Wonderful job Mr. Rosli."*
6. *"Superb training especially the space learning concept. Energetic and inspirational. Trainer is very good at controlling the crowd & getting audience attention to topics discussed."*
7. *"Lively, knowledgeable and precise. A very inspiring motivator. Approachable and easy to get along."*

8. *"This course is really different from normal courses I attended. TQ. TQ. TQ. A lot of positive things that I gained from this course."*
9. *"The best speaker/trainer ever! Feel happy, enjoy every time each session held. Never feel bored and 'semangat' or enthusiastic to complete each assignment given."*
10. *"The trainer has a wealth of experiences and very enthusiastic. Every question was answered and gave me a very positive impact."*
11. *"This course syllabus is very good and very practical. Personally, I must say that the teaching by the trainer is the best and he delivered his knowledge sincerely and not boring at all."*
12. *"Very interesting class. Very motivated and committed trainer. Well structure in the presentation. This course gives me something to change."*
13. *"Trainer is very knowledgeable in his field. This training has given a big impact in myself. I am truly thank you."*
14. *"Excellent course! The trainer is very experienced, easy to understand and to apply at workplace. This course is highly recommended for all managers."*
15. *"All the elements well structured. All activities were organize & arranged very effectively. Trainer very well-trained to get people involved instead of just listening."*

16. *“Fantastic course and keep it up. I will definitely become a better manager.”*
17. *“This is the best training I have attended so far. Good job! Would like to attend for future training.”*
18. *“Frankly, the trainer is a very competent and thorough in his training delivery which is easy to understand and to implement in my daily work environment.”*
19. *“The course is fruitful / cannot leave home without it. Exceeded my expectations. The trainer – so articulate, very sharp, very clear – a management guru.”*
20. *“I am more inspired to be an influential leader and have a positive impact on my job & team. Thank you!”*

Note that the joint influence of the trainer's effectiveness (TE) and training methodology (TM) – (*‘time space learning’*) indicates that for the employees or participants to apply and practice the soft skills acquired during the training process, they need a competent trainer, and they must be given some space (i.e. *‘time space learning’* or break period) for them to adequately implement the skills they had acquired. Referring to Figure 4.5, soft skills acquisition ( $R^2 = 0.32$ ) was an indication that 32% variance of the latent factor soft skills acquisition can be explained by its observed variables. As for the work performance, ( $R^2 = 0.62$ ), it is an indication that the latent factor work performance can be explained by its observed variables by 62% of variance.

The hypothesized research model was accepted due to the significance of all paths and the overall goodness-of-fit indexes revealed a model fit. In the hypothesized research model, all the goodness-of-fit indexes that fulfilled the requirement of the acceptable model fit with the paths and correlations were significant. Therefore, the hypothesized research model has provided a reasonable explanation of the structural model employed in this study. The model was explained by its three (3) exogenous variables (trainer's effectiveness (TE), training methodology (TM) and soft skills (SS) acquisition). Exogenous variable is "*variable that exerts an influence on the cause and effect relationship between two variables*" (Sekaran, 2003). The model also was explained by two (2) endogenous variables (soft skills (SS) acquisition and work performance (WP)), whereby endogenous variables are similar (but not exactly) to dependent variables; 23 observed variables defined to be their respective factors; 23 variances of errors and 2 residuals.

The findings have indicated that trainer's effectiveness (TE), training methodology (TM) – '*time space learning*' and work performance (WP) were constructs that complemented each other rather than competing; while the soft skills (SS) acquisition was the only direct predictor of participants' or employees' work performance. The training methodology (TM) using '*time space learning*', when received by trainees or participants would enable them to apply and practice what they have learned; and they also have the opportunity to continue with the training process and improve on their mistakes. The direct impact of training methodology (TM) using '*time space learning*' on soft skill (SS) acquisition was higher than that of the trainer's effectiveness (TE).

The findings from the estimation of the structural research model have contributed to the implications for the modeling of "*the impact of soft skills on work performance*". It



has further extended the theory from the learning theory in the context of the business training environment based on the selected items and the structural hypothesized model.

#### **4.4.3 Direct and Indirect Effects**

Direct and indirect effects in this study are shown through taking account the regression coefficient in the path analysis. This is achieved by cross-checking in the standardized beta or the regression weight. This statistical technique enables examination of causal relationships between two or more variables. It is based upon a linear equation system and used mainly in the attempt to understand comparative strengths of direct and indirect relationships among a set of variables.

Specifically, the third and fifth research objectives of this study are to empirically explore the soft skills (SS) acquisition variable as the mediating role on the relationships between the construct of '*time space learning*' - training methodology (TM), trainer's effectiveness (TE), and employees' work performance (WP) (see Table 4.11). Following are the research objectives (RO) number three (3) and five (5) as stated in chapter one:

- (3) To explore the mediating role of soft skills (SS) acquisition in the relationship between training methodology (TM) and work performance (WP).
- (5) To investigate the mediating role of soft skills (SS) acquisition in the relationship between trainer effectiveness (TE) and work performance (WP).

As such, the contribution of soft skills (SS) acquisition variable in mediating variations in the relationship between ‘*time space learning*’ - training methodology (TM), trainers’ effectiveness (TE); and employees’ work-performance (WP) was examined (see Table 4.11 and Table 4.12).

**Table 4.11:** Summary of Direct and Indirect Effect of Variables  
Soft Skills (SS) Acquisition

Predictor Variables	Soft Skills Acquisition			Employees’ Work Performance		
	Direct Effect	Indirect Effect	Total Effect	Direct Effect	Indirect Effect	Total Effect
Trainer’s Effectiveness	<b>0.092</b> (> 0.05)	–	0.092	0.2011	0.014	0.211
Training Methodology (‘ <i>time space learning</i> ’)	<b>0.158</b> (> 0.05)	-	0.158		0.024	0.176

NOTE: Standardized path estimates

#### 4.4.3.1 Calculation of Significance of Indirect Effects

To determine the specific indirect effect of both trainers’ effectiveness (TE) and training methodology (TM) – ‘*time space learning*’ on employees’ work performance (WP) via soft skills (SS) acquisition, I employed the **Sobel Equation** to test for the statistical significance of the total indirect effects for the variables in the model. Table 4.11 shows the indirect effect to test the mediating effect of soft skills (SS) acquisition on the employees’ work-performance (WP) as hypothesized in H3 and H5.

**Table 4.12:** Mediating Significance Effect of Soft Skills (SS) Acquisition

Predictor Variables	Employees' Work Performance			<i>p</i> -Value	H	Results
	Direct Effect	H	Indirect Effect			
Trainer's Effectiveness	0.2011	Significance	0.014	0.07	Not Significance	No Mediation
Training Methodology ('time space learning')	0.176	Significance	0.024	0.04 (< 0.05)	Significance	Mediation

NOTE: Calculation of significance indirect effect - Sobel Test

#### 4.4.3.2 Hypothesis Testing Result of Indirect Relationship of Variables

Table 4.11 and Table 4.12 show the results of the hypotheses testing. H3 and H5 measure level of mediation effect between endogenous and exogenous variables through the calculation of Sobel Test, to test for the statistical significance of the indirect effect (MacKinnon, 2002). From Table 4.12, training methodology (TM) – ‘time space learning’ indirectly influences work performance (WP) by 2.4% only; and trainer’s effectiveness (TE) indirectly influences work performance (WP) by only 1.4%. Thus, soft skills (SS) acquisition mediates relationships between ‘time space learning’ - training methodology (TM) and employees’ work-performance (WP) since *p*-value equals 0.04 (< 0.05 significant level). On the other hand, soft skills (SS) acquisition does not mediate relationships between trainer’s effectiveness (TE) and employees’ work-performance (WP) since the *p*-value is equal to 0.07 (> 0.05 significant level).

### **Hypothesis-3: (H3)**

*Soft Skills (SS) acquisition mediate the relationship between Training Methodology (TM) and Work Performance (WP)*

Based on the results in Table 4.11 and Table 4.12, the interaction between training methodology ('time space learning') (TM) and soft skills (SS) acquisition is significant at the 0.05% confidence level. More so, the interaction between training methodology ('time space learning') (TM) and employee's work performance (WP) is also significant with standardized beta  $\beta = 0.176$  and  $p\text{-value} = .04 < .05$ . Thus, soft skills (SS) acquisition does have a mediating effect on the relationship between training methodology ('time space learning') (TM) and employee's work performance (WP).

Therefore, H3 is accepted.

### **Hypothesis-5: (H5)**

*Soft Skills (SS) acquisition mediate the relationship between Trainer's Effectiveness (TE) and Work Performance (WP)*

From the results in Table 4.11 and Table 4.12, the interaction between trainers' effectiveness (TE) and soft skills (SS) acquisition is not significant at the 0.05% confidence level ( $0.092 > 0.05$  level of significance). Furthermore, the interaction between trainer's effectiveness (TE) and employee's work performance (WP) is also not significant; the standardized beta  $\beta = 0.092$  and  $p\text{-value} = .07 > .05$  (see Table 4.12). Thus, soft skills (SS) acquisitions have no mediating effect on the relationship between trainers' effectiveness (TE) and employees' work-performance (WP).

Therefore, H5 is rejected.

#### 4.4.3.3 Mediation Test – Baron and Kenny

Existence of mediation in relationship between a pair of variables can be established via linear regression (Baron & Kenny, 1986). Baron and Kenny used a 4-step approach to perform the mediation test (Baron & Kenny, 1986; Kenny, Kashy, & Bolger, 1997).

Step-1: The regression of the outcome on the treatment, ignoring the mediator, is significant.

Step-2: The regression of the mediator on the treatment is significant.

Step-3: The regression of the outcome on the mediator, controlling for the treatment, is significant.

Step-4: Regression of the outcome on the treatment controlling for the mediator is non-significant and nearly-zero.

##### STEP-1: Mediation Analysis

To examine the Hypothesis that ‘*time space learning*’ - training methodology (TM) and trainer effectiveness (TE) significantly predicted work performance (WP) via soft skill acquisition (SS), the scores of all independent variables were regressed onto WP scores (see Table 4.13).

**Table 4.13:** Dependent Variable (WP), Constant TE, TM - Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	<i>t</i>	Sig.
	B	Std. Error	Beta		
1 (Constant)	4.462	.291		15.343	.000
TE	-.183	.048	-.229	-3.798	.000
TM	-.129	.059	-.133	-2.205	.028

a. Dependent Variable: WP

Analysis revealed that greater ‘*time space learning*’ - training methodology (TM) and trainer’s effectiveness (TE) significantly predicted a higher level of work performance (WP) [ $R^2 = .068$ ;  $F(2,259) = 10.436$ ,  $p < .000$ ;  $\beta = -.229$  (TE) and  $\beta = -.133$  (TM)]. (See Table 4.13)

## STEP-2: Mediation Analysis

Having establish the significant relationship between independents variables (TE and TM) and dependent variable (WP), the second step is to establish significant relationship between the independent variables (TE & TM) and the mediating variable (SS). Scores of the independent variables were regressed onto the SS scores.

**Table 4.14:** Dependent Variable (SS), Constant TM, TE - Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	<i>t</i>	Sig.
	B	Std. Error	Beta		
1 (Constant)	5.241	.262		19.972	.000
TM	-.138	.053	-.156	-2.608	.010
TE	-.181	.043	-.249	-4.167	.000

a. Dependent Variable: SS

Results indicated that both TE and TM significantly predict the mediating variable (SS) [ $R^2 = .086$ ;  $F(2,259) = 13.112$ ,  $p < .000$ ;  $\beta = -.249$  (TE) and  $\beta = -.156$  (TM)]. (See Table 4.14)

## STEP-3: Mediation Analysis

Similar procedures were utilized to examine the significant relationship between mediating variable (SS) and the outcome variable (WP) in step-3.

**Table 4.15:** Dependent Variable (WP), Constant SS - Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	<i>t</i>	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.235	.250		4.940	.000
SS	.503	.061	.459	8.288	.000

a. Dependent Variable: WP

The result revealed that the mediating variable (SS) significantly predicted the dependent variable work performance (WP) [ $R^2 = .207$ ,  $F(2,259) = 68.686$ ,  $p < .000$ ;  $\beta = .459$  (SS)]. (See Table 4.15)

#### STEP-4: Mediation Analysis

Once a significant relationship between each pair of variables was established, the mediational model was tested by regressing the dependent on the independent variables, while controlling for the mediator. To do this, the dependent variable work performance (WP) was regressed on the independent and mediating variable to check whether the TM and TE predicting value will be non-significant and nearly-zero (See Table 4.16).

Results demonstrated that when controlling for general soft skill acquisition, training methodology no longer accounted for a significant portion of the variance [ $R^2 = .221$ ;  $F(2, 259) = 25.524$ ,  $p < .001$ ;  $\beta = -.068$  (TM),  $p > .05$ ] indicating that soft skill acquisition fully mediated the relationship between '*time space learning*' - training methodology and work performance.

**Table 4.16:** Dependent Variable (WP), Constant SS, TE, TM - Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	<i>t</i>	Sig.
	B	Std. Error	Beta		
1 (Constant)	2.084	.425		4.906	.000
SS	.454	.063	.413	7.182	.000
TE	-.101	.045	-.126	-2.215	.028
TM	-.067	.054	-.068	-1.227	.221

a. Dependent Variable: WP

On the other hand, the model revealed a significant relationship between trainer effectiveness and work performance when controlling for soft skill; indicating that soft skill does not fully mediate the relationship between trainer effectiveness and work performance. See Table 4.16 for the results.

#### 4.4.3.4 Summary of Indirect Relationship of Variables

The empirical relationships between constructs shows that role of training methodology (TM) - (*time space learning*) is positively related to soft skills (SS) acquisition and employee's work performance (WP) as hypothesized. Both trainer's effectiveness (TE) and training methodology (*time space learning*) (TM) were found to be positively associated with employee's work-performance (WP).

In the structural research model, soft skills (SS) acquisition was found to be the mediator between exogenous variables training methodology (*time space learning*) (TM) and employee's work-performance (WP). For mediating effects of soft skills (SS) acquisition on each hypothesized path; this study found partial mediating effects of soft skills (SS) acquisition.



The first effect was non-mediating effects of soft skills (SS) acquisition on the relationship between trainer's effectiveness (TE) and employee's work-performance (WP). The second was the partial mediating effects of soft skills (SS) acquisition on the relationship between training methodology (*'time space learning'*) (TM) and employee's work-performance (WP).

#### 4.5 SUMMARY

This research study has utilized two (2) phases of analysis comprising the two-step Structural Equation Modeling (SEM) analysis. The first research question directed me to analyze the measurement model to find out whether all the items of the research conceptual framework model loaded on the 3-factors model; specifically, soft skills (SS) acquisition, trainer's effectiveness (TE) and training methodology (*'time space learning'*) (TM) from the sample size of 260 participants from nine (9) different organizations. All these 3 factors were able to explain the measurement model of the training context. The second analysis led me to prove that employee's work performance (WP) was a 1-factor model. The structural research model was analyzed with only one hypothesized model; upon which the results revealed a model fit to answer three (3) out of the five (5) research questions.

For the last two (2) research questions, I empirically explored the soft skills (SS) acquisition variables as the mediating role on the relationship between the construct of trainer's effectiveness (TE), training methodology (*'time space learning'*) (TM), and employee's work performance (WP). The soft skills (SS) acquisition was found to be the mediator between variables training methodology (*'time space learning'*) and employee's work performance (WP). This was further tested using the traditional

mediation test of Baron and Kenny where the results demonstrated that when controlling for general soft skills (SS) acquisition, training methodology (TM) no longer accounted for a significant portion of the variance, indicating that soft skills (SS) acquisition fully mediated the relationship between training methodology (*'time space learning'*) (TM) and work performance (WP). Therefore, Hypothesis 3 was accepted.

The findings, however, showed no significant interaction between trainer's effectiveness (TE) and soft skills (SS) acquisition; and no significance in the interaction between trainer's effectiveness (TE) and employee's work performance (WP). Hence, soft skills (SS) acquisitions have no mediating effect on the relationships between trainers' effectiveness (TE) and employees' work-performance (WP). Using the mediation test of Baron and Kenny, the model revealed a significant relationship between trainer's effectiveness (TE) and work performance (WP) when controlling for soft skills (SS); indicating that soft skills (SS) do not fully mediate the relationship between trainer's effectiveness (TE) and work performance (WP). Therefore, Hypothesis 5 was rejected.

## CHAPTER 5: DISCUSSION, CONCLUSION, AND LIMITATION

### 5.1 INTRODUCTION

This research study was embedded to two (2) theories namely; *the systems theory*, and *the learning theory (specifically on adult-learning theory)*. The main purpose of the research was to examine the causal relationships between the training methodology (TM), specifically the '*time space learning*' methodology, trainer's effectiveness (TE), soft skills (SS) acquisition, and employees' work performance (WP), using only one hypothesized research model. In this chapter, I summarize the results of the research questions posed in Chapter One. I then discuss the theoretical, methodological, policy implications, limitations of the study and recommendations for future study. Further recommendations relating to the findings in this study are briefly elaborated to broaden the issues related to extension of the theory.

### 5.2 DISCUSSION AND CONCLUSION

#### 5.2.1 Research Question No. 1

To answer this research question no. 1 - (*Does the soft skills (SS) acquisition have a direct influence on work performance (WP)?*), the relationship between soft skills (SS) acquisition and work performance (WP) was evaluated for the best fit model using the hypothesized model. It was found that the hypothesized model adequately explained the data. The model revealed that soft skills (SS) acquisition had *positive influence* on employees' work performance (WP). The findings showed that the soft skills (SS) acquisition directly influence work performance by 79%. As such, the hypothesized

model fitted the data very well. Therefore, the hypothesized model was accepted to be the best fit model.

This shows that soft skills (SS) is indeed, a very critical competency to have that will enable an employee to enhance job performance in an organization. This finding also confirms findings of numerous past studies on the importance of having soft skills. Hence, all organizations should place great emphasis in developing soft skills for all employees at all levels to create a high work performance culture. They should see it as an investment rather than an expense or cost to the organization.

#### **5.2.1.1 The Direct Effect of Soft Skills (SS) Acquisition on Work Performance (WP)**

In general, the findings showed a strong empirical support for the causal relationship between soft skills (SS) acquired by employees during the training and their work performance (WP). An inspection of the model indicated that when trainees or employees acquire the necessary soft skills elements this led to increase in work performance. Employees' ability to master the soft skills concepts learned during training can lead to attitudinal and behavior change, which will subsequently contribute immensely to culture changes and increased work performance. Putting it differently, if soft skills are broadly acquired and applied by employees, individual work performance will significantly increase (Homer, 2001; Kantrowitz, 2005). This finding is also in tandem with propositions of Weber, Finley, Crawford, and Rivera (2009), wherein they contend that soft skills contribute toward work performance of managers in terms of decision making and problem solving. Similarly, in the teaching profession particularly,

the Tang et al. (2015) study suggested that soft skills should be imparted to all teachers in Malaysia in order to create a quality and effective teaching practice.

On the other hand, the results of this present study contradict the findings of Robert and Donald (2001), in which soft skills competency indicated not to have really contributed greatly to organizational improvement. However, researchers such as Spencer (1994), Blackburn and Rosen (1993), Heneman and Judge (2000) as well as Ahmad and Schroeder (2003) are of the opinion that organizational success is a function of the system in which the management set up in an organization that can adversely improve the employees' work performance. As such, if all required and relevant soft skills are given to employees, work performance in an organization will improve; but it will still depend on the ability of the employees to utilize the given information to improve their job performance.

In the present study, employee's work performance was found to be explained by 79% of its predictor soft skills acquisition. This indicates that one unit increase in soft skills of an employee, will lead to 79% increase in work performance. It can be concluded that the more the employees learn and utilize the soft skills acquired such as *interpersonal or people skills, problem solving skills, decision making skills, communication skill, leadership skills*, and so forth, the more they develop positive behavior and attitude toward their job, hence increase in performance at work.

### **5.2.2 Research Question No. 2**

In responding to this research question no. 2 – (*Does the training methodology (TM) have effect on the soft skills (SS) acquisition?*), the hypothesized model was evaluated

for the best fit model. It was found that hypothesized model was able to explain the data. The model posited or hypothesized that training methodology (TM) – (*'time space learning'*) positively influenced soft skills (SS) acquisition. The findings showed that the training methodology (*'time space learning'*) has a high positive impact on soft skills acquisition by 51%. From a conceptual standpoint, the hypothesized model fitted the data well. Therefore, the hypothesized model was accepted to be the best fit model.

This shows that the soft skills learned by the trainees or employees, can be more effective in changing their skills and behavior or attitude to impact on their work performance, if the training they undergo utilized the *'time space learning'* - training methodology as part of the learning process. Since most organizations like to use *'massed training'* method (training that runs consecutively with no *'space breaks'*) in developing their employees in soft skills, this finding should change the management mindset in favor of investing in their employees for future soft skills training and development.

#### **5.2.2.1 The Direct Effect of Training Methodology (TM) on Soft Skills (SS)**

##### **Acquisition**

As expected, the results showed a strong empirical support for the causal relationship between training methodology (TM) – (*'time space learning'*) and the soft skills (SS) acquired by trainees or employees during the training (i.e., training methodology has a direct influence on soft skills acquisition of trainees or employees). This indicates that the training methodology which uses *'time space learning'* method has directly contributed to the rate at which employees are able to understand and practice the soft skills acquired during the training program. This finding supports the findings of Brown (2005), wherein learning spaces have been described to be the full range of places in

which learning occurs, from real to virtual, from classroom to job. In addition, this finding also supports the argument of Farah et al. (2009) and Sutton et al. (2002), that formation of a memory is highly sensitive not only to the total amount of training, but also to the “pattern of trials” used during training. And the ‘*time space learning*’ training methodology (TM) is able to distribute and retain learning for long-term usage than massed training (*training that runs consecutively with loaded information*).

Furthermore, Kauffeld and Lehmann-Willenbrock (2010) and Russ-Eft (2002) suggested that the more the trainees or employees are provided with sufficient time and resources to move from training classroom to workplace; and then back to the training classroom for evaluation, the greater the extent to which training content will be used on the job (experiential learning). Kauffeld and Lehmann-Willenbrock (2010) also argued in favor of the findings of this study by mentioning the superiority of ‘spaced training’ over ‘massed training’, regarding transfer quality (*number of steps implemented after the training*), self-reported sales competence, and positive organizational outcomes. This combined effect of the experiential learning model and ‘*time space learning*’ is very interesting and might give a remarkable and successful transfer of training skills into the job at the workplace.

Finding of this study also showed that employees’ soft skills acquisition (SS) was found to be explained by 51% of its predictor training methodology (‘*time space learning*’) (TM). It can be concluded that in addition to effectiveness of the trainer, training methodology, particularly using ‘*time space learning*’ method, is highly useful and relevant to employees’ soft skills (SS) acquisition.

### 5.2.3 Research Question No. 3

As for research question no. 3 – (*Does the soft skills (SS) acquisition mediate the relationship between training methodology (TM) and work performance (WP)?*), the findings show that both the interactions between training methodology (TM) – (*‘time space learning’*) and soft skills (SS) acquisition are significant; and the interactions between training methodology – (*‘time space learning’*) and employee’s work performance (WP) are also significant. This indicates that soft skills acquisition has a mediating effect on the relationship between training methodology (*‘time space learning’*) and employee’s work performance (i.e., there is an indirect effect between TM and WP). Therefore, we can conclude that hypothesis no. 3 (H3) in this research study is accepted.

This indicates that *‘spaced-learning’* method of training measured in terms of skills application and behavior change, have indirect influence on employee performance such as interpersonal relations among workers, lower communication breakdown, communicate ideas effectively, lead people effectively, and so forth, through soft skills acquisition.

It can be concluded that soft skills training without using appropriate training methodology (TM) – (*‘time space learning’*) might not lead to work performance improvement after the training. Thus, inclusion or selection of *‘time space learning’* - training methodology, is highly relevant and important to ensure return on investment in the soft skills training and development of employees in an organization. As such, *‘time space learning’* - training methodology is a very effective training methodology that can bring about enhanced performance of trainees after the training.



#### 5.2.4 Research Question No. 4

Responding to this research question no. 4 – (*Does the trainer's effectiveness (TE) have effect on the soft skills (SS) acquisition?*), I have performed a Structural Equation Modeling (SEM) in which the hypothesized model related to causal relationship between trainer's effectiveness (TE) and soft skills (SS) acquisition was tested. The answer to this research question is yes; and it was found that the model trainer's effectiveness (TE) factor has provided a reasonable explanation to the positive influence of soft skills (SS) acquisition latent variables. The findings showed that the trainer's effectiveness (TE) does have a positive influence on soft skills acquisition by 24%. The factor of trainer's effectiveness (TE) was presented by the items related to trainer's effectiveness (not the training effectiveness) in conducting and delivering the soft skills training program; and the factor soft skills (SS) was represented by the items related to the following areas: *self-confidence or self-assurance* (Tracy, 2012), *interpersonal or human relations* (Honey, 1988; Katz, 1991; Strang, 2007), *communications skills* (Leigh et al., 1999; Lussier, 2012; Mantel et al., 2004), *attitude* (Mueller, 2012), *leadership skills* (Mantel et al., 2004; Rosenau, 1998), *management skills* (Boyatzis, 1982), *creative thinking skills* (Rosenau, 1998), *problem solving skills* (Leigh et al., 1999; Lussier, 2012), as well as *ethics and professional moral skills* (Leigh et al., 1999; MOHE, 2006).

This finding shows that for organizations to invest in soft skills training and development for their employees, it is not just the training design and syllabus or modules to be covered that should be the criteria to decide (Abdullah Lin et al., 2008); but management also needs to look at the trainer's competencies too, in order to ensure effective training program implementation (Gauld & Miller, 2004; Lawson, 2004).

#### **5.2.4.1 The Direct Effect of Trainer Effectiveness (TE) on Soft Skills (SS)**

##### **Acquisition**

The overall results revealed a strong empirical support for a non-reciprocal relationship between trainer's effectiveness (TE) and soft skills (SS) acquisition. An examination of the model has indicated that when 'the trainer' effectively conducted, trained, and presented adequate information about the soft skills; the more the employees or trainees are able to understand, absorb the soft skills learned and feel motivated to apply and practice the skills to help them perform on the job. The trainer ability to conduct an effective training on soft skills concepts among the trainees can be enhanced via provision of adequate information on soft skills (i.e., the importance of acquiring the skills and the training methodology used in delivering the training program). Chukwu Gosim (2016) found that trainer's attributes and competencies such as facilitation, real-life examples, group work, interactions with participants, demonstration, participant involvement and stories/illustrations, were the driving force of training effectiveness. In addition, the Mat Rashid et al. (2010) study in Malaysia focusing on employees from various organizations who have attended a training program revealed that trainer's competencies also do influence the effectiveness of employees' performance. Furthermore, as supported by Powell and Serkan (2010), trainers who provide enough information with regard to soft skills acquisition will enable employees or participants to find out information on the necessary soft skills needed to bring about change in their work performance. This will invariably increase the overall organizational performance and enhance the organization's competitive advantage.

Consequently, in this present study, trainer's effectiveness (TE) does have a positive influence on employees' soft skills (SS) acquisition by 24%; and the soft skills (SS)

acquisition can be explained by 32% of its predictor, trainer's effectiveness (TE). It can be concluded that employees or trainees who feel that the training style used by the trainer is well assimilated, will display the appropriate work performance attitude when they get back to work.

#### **5.2.5 Research Question No. 5**

The findings in this study on research question no. 5 - (*Does the soft skills (SS) acquisition mediate the relationship between trainer's effectiveness (TE) and work performance (WP)?*) showed that both the interactions between trainers' effectiveness (TE) and soft skills acquisition (SS) is not significant; and the interaction between soft skills (SS) acquisition and employee's work performance (WP) is also not significant. This indicates that soft skills acquisitions have no mediating effect on the relationships between trainers' effectiveness and employees' work performance (i.e., there are no indirect effects between TE and WP). Therefore, we can conclude that hypothesis no. 5 (H5) in this research study is to be rejected.

Since the findings indicate that the trainer's effectiveness (TE) measure in terms of the trainer's competencies and attributes, do not have any indirect influence on the employee performance, it can be concluded that work performance (WP) is independent of the trainer's effectiveness (TE). In other words, the trainer, whether he/she is competent or not in delivering a training program does not have any relationships on work performance of the employees. Furthermore, it makes lots of sense too, since the trainer who can be an external consultant who does not know much about the detailed operations of the employees' job tasks would not be able to perform as well as those in the specialized fields.

However, if the trainer (either internal trainer or external consultant) is to conduct soft skills training program to the employees, his/her effectiveness in conducting the training program does make a difference in the employees' competencies – *from the knowledge and skills acquired after attending the training program* – toward the employees' work performance. This is supported from the finding on research question no. 4 which revealed that the trainer's effectiveness (TE) does have a positive influence on the soft skills acquisition by the employees/trainees by 24% which in turn affects their work performance.

### **5.3 IMPLICATIONS OF THE STUDY**

The present research finding provides a number of implications to an organization's work performance culture and employee's development, besides contributing to the body of knowledge in an extension of literature in the learning theory, specifically in the training methodology (TM) – (*'time space learning'*).

#### **5.3.1 Theoretical Implications**

Even though studies have shown that all the employee's work performance such as an increase in productivity are mostly influenced by hard skills (technical and job-related skills), however this study has proven that soft skills acquisition will directly influence employee work performance. Theoretically, it can be concluded that if organizations plan to develop their employees in soft skills area, they should consider seriously adopting their soft skills training program using the '*time space learning*' - training methodology (TM) as it will highly likely affect their work performance improvement positively.

In addition, the influence of trainer's effectiveness (TE) on soft skills (SS) acquisition, indicates that the interactions between the trainer conducting the soft skills training program and the trainees or employees attending should ensure the trainer ability to provide accurate information on the content and the concept of the training; and to motivate them to apply and practice in their job during session breaks. Thus, it can be concluded theoretically, that if organizations can identify and select a competent trainer to conduct the soft skills training for their employees, most likely they will see the enhancement in their employees' work performance. The findings had proven that there is a causal relationship between trainer's effectiveness (TE) and soft skills (SS) acquisitions.

### **5.3.2 Methodological Implications**

The employee's work performance (WP) construct was found to be a single construct (one-dimension) which can be explained by one factor. The trainer's effectiveness (TE) and training methodology (TM) cannot be represented by separated measures. This indicates that work performance items were measured together as one dimension. The findings in this research can be adopted for further research in enriching the literature of employees' work performance especially on the items that will enhance work performance and organizational development.

This study has demonstrated the usefulness of multivariate analysis specifically the CFA and SEM which provide an insight concerning the inter-relationships between the observed variables and the latent variables related to the theory and the relationship between the latent variables. The instruments used were self-developed emanating from literature being reviewed, training industry experiences and from subject matter experts,

and was empirically proven to be sound in psychometrics in this research model conceptual framework.

### 5.3.3 Organizational Employees Development Implications

This study has highlighted the urgency of intervening into the patterns of employees' work performance and soft skills acquisition relationship, precisely the issue related to the use of '*time space learning*' - training methodology to enhance the soft skills acquisition and organizational employee development from the organization's training investment. It can be suggested that the research model implies that employees who had undergone soft skills training using '*time space learning*' - training methodology are better in terms of the performance at the workplace after the training.

In the present context, the soft skills are represented by skills such as *communication skills, decision making and problem solving skills, leadership skills, interpersonal or people skills, and so forth* as experienced by the trainees or employees during the training session. In the real organizational context, employers should be able to seize the benefit inherent in the use of '*time space learning*' - training methodology, in lieu of other training methods. This will serve as a catalyst in expediting the employees' productivity by giving them the opportunity to *apply, practice* and *experiment* what they learned in the classroom back into their job, and to evaluate their work performance enhancement while the training program is still ongoing and after the program ended.

In addition, with an effective training methodology – ('*time space learning*'), employees will be able to experience in their real workplace environment what they had learned in the classroom. The degree of utilization and experience is determined greatly

by their own attitude of willingness to improve and change, their workplace environment factors, and support from their supervisors - not only after the training but also while the training is ongoing. More enquiries and research can be carried out regarding the issues on comparing the effects of different types of training methodology on soft skills acquisition and employee work performance.

#### **5.3.4 Policy Implications**

Understanding employees' orientations, experience of trainer's effectiveness and training methodology - ('*time space learning*'), as well as the necessary elements of soft skills that will promote work performance, can be part of the policy or direction of an organization.

As for the soft skills syllabus/curriculum, the organization can identify the soft skills areas that contribute most to the employees' work performance; rather than just focus on the hard skills (technical or job-related) types of training. The focus should be on skill building, mindset, attitude and/or behavior change development for the employees, and not just acquiring the knowledge.

Upon firming up the soft skills areas as part of the organization's policy, the human resource development (HRD) department of the organization should also identify the most effective training methodology that needs to be incorporated in the training program. The findings of this research study had opened an avenue for the HRD department to utilize the '*time space learning*' - training methodology, in order to ensure the trainees or employees will develop and change. To change is not easy; as

many had experienced after the training ended, people will normally go back to their normal behavior or practices.

In addition, appointment or hiring of soft skills trainer or facilitator or speaker can include policy that give priority to trainers that can contribute to overall organizational goals, instead of just appointing trainers according to the lowest fees charged for the sake of organizing a training program to fulfill the KPIs or targets. Organizations can formulate a policy in terms of selection criteria for the trainer to be appointed, such number of years or experienced in delivering training program; having a license from a well- established training organization of world class standard; had undergone train-the-trainer certification process; customer satisfaction (past participants) rating and comments on the trainer; and so on.

#### **5.4 LIMITATIONS OF THE STUDY**

A number of limitations have inherently constrained the scope of this study and many of these are outside the control of the researcher. The present research study was subjected to the following limitations:

- (1) The main limitation of this study was the data collection. A normal random sampling cannot be used in this research since this study is designed to capture data only from ‘qualified’ volunteer respondents. The word ‘qualified’ here means that the respondents **MUST BE** those who had attended the soft skills training program conducted using the ‘*time space learning*’ - training methodology (TM). Hence, to get enough population sampling (*which took a very long time, that is over a period of four years due to many constraints that are not within the control of the*



*researcher*); the researcher need to wait for an organization to agree on a soft skills training program that utilized a ‘*time space learning*’ - training methodology (TM) specifically, instead of the usual consecutively run program or ‘massed learning’.

(2) Another limitation was the difficulty of getting the trainees or employees’ supervisor or bosses cooperation to evaluate on the participants’ work performance as suggested by Griffin et al. (2007). In view of this, the researcher had no choice but to ask the participants themselves to do their own self-assessment honestly on their work performance improvement questionnaires – instruments adopted from Griffin et al. (2007). As such, there is possibility that some of the participants might be biased in their rating on their actual work performance. Furthermore, the present study was related to trainees’ or employees’ socio-economic and socio-cultural factor too; hence, the data acquired depends on their honesty and willingness in giving accurate information.

(3) Not forgetting, there could also be other external factors that inhibit the employees from applying and practicing what they had learned in the classroom back to their real workplace environment. These external factors could be, for example, not getting support from their immediate supervisors; feeling demotivated due to the work environments or unfavorable compensation; work environment not flexible enough (i.e., too rigid to enable them to apply something new they had learned), and many more.

(4) In this research study, the employees or participants (*who were selected to attend the soft skills training program by their organization*) are mainly from the executive and managerial level with exception of a few at supervisory level. Hence, the results

could be different if coming from different sample size group of participants such as non-executives level, general worker and even from the top management level group due to their education background and/or experiences.

- (5) The present research study only involves employees from nine (9) different companies or organizations. The mix is considered very good since the companies comes from various cultures – *private sectors, government linked companies, government and state government itself, and multinational organizations* (see Appendix-1 - List of Participants' (or Respondents) Organization); hence, the findings may not be generalized to all organizations in the whole spectrum of industries throughout the world.

One of the obvious cultural differences from these nine (9) organizations which affects the participants is the language used in delivering the soft skills (SS) training program. Those participants coming from government and state government bodies, and participants at supervisory level, are more comfortable that the training program be delivered using dual language -- English and Malay (national) language -- with more emphasis on Malay language. On the other hand, participants coming from the multinational organizations (MNCs) are more comfortable that the delivery be in English language.

Another significant cultural difference affecting the participants in the training program were the examples, illustrations and cases being used in the role play, problems to be solved, leadership style of the management, and so forth, which requires different and unique examples, illustrations and cases to each of the organizations involved. Thus, the findings from this research may not be 100% applied directly to all organizations from all spectrum of industries in Malaysia and throughout the world.

(6) The sixth limitation could be the trainer's effectiveness himself/herself in conducting the soft skills training program which fails to make the participants grasp the subject matter and/or to be motivated to apply, practice and experiment it in their real workplace environment after each training session finishes. Instead, the participants just acquire the knowledge from the training program, but did not put into practice what they had learned during the 'space breaks'.

(7) Lastly, conditions which were beyond the researcher's control i.e. the trainees or participants attending the training may not get the 'right' support from their workplace environment, such as from their peers who did not attend the similar training program are showing and perhaps influencing them to do otherwise as according to their existing behaviors or working culture (e.g., back stabbing people to gain advantage; not respecting their subordinate's views and opinions; hardly showing recognition and appreciation to their staff; and so on). It could also be their immediate superior (or boss) who is not encouraging them, instead, discouraging them to practice, apply and adopt the new acquired knowledge and skills for whatever reasons; hence, the participants will be unmotivated and unable to change to a new and better ways.

In summary, regardless of the abovementioned limitations, the methods employed in this study are believed to be appropriate and justifiable based on the available data collected and the research objectives.

## 5.5 RECOMMENDATIONS

This present research study was a cross-sectional study on the causal relationships of the trainer's effectiveness (TE), soft skills acquisition (SS), training methodology (TM) – (*'time space learning'*), and employee's work performance (WP). A cross-sectional study is a type of observational study that involves the analysis of data collected from a representative subset, *at one specific point in time* - that is, cross-sectional data (Sekaran, 2003). The research findings may further improve and contribute to the wealth of systems theory and learning theory as well as employees' soft skills acquisition, if more emphasis were given as follows: (a) a longitudinal study of effect of soft skills acquisition using '*time space learning*' - training methodology on employees' work performance. A longitudinal study or survey is a correlational research study that involves repeated observations of the same variables over long periods of time (Sekaran, 2003); (b) there is also a need to conduct structural analysis to determine whether external factors like types of organization, age-group, and so forth, have moderation effect or not on the relationship among the variables.

The first recommendation addresses a longitudinal research design of soft skills acquisition which can document the changes in employee performance. Based on the findings of the present research study, future work can focus on collecting the data in another time frame; for example, at the start, middle and end of the program. The data can be correlated to examine the consistency of the results of employee's performance after the training ended, and whether they have changed permanently over time.

The second recommendation is to emphasize on future researcher to examine from other influential factors of employee's work performance. The present findings have

demonstrated the impact of the trainer's effectiveness and training methodology – (*'time space learning'*) on soft skills acquisition, and also the main effect of soft skills acquisition on employee work performance. In future, research should examine other external factors such as types of organization and age-group towards work performance improvement and/or even soft skills acquisition. Understanding the impact of these external factors will provide an insight into how they influence the employees' performance at work in more detail.

In conclusion, I strongly recommend that both the government and private sector organizations including multinational organizations, should adopt the *'time space learning'* training methodology in conducting the soft skills training programs for their employees; as well as to identify the 'right' trainer (based on criteria specified by their HRD department) to train their employees, in order to: (i) ensure the return of their training investment or ROI; (ii) make it a KPI (key performance indicator) target to equip the employees with necessary soft skills needed to improve on work performance, thus creating a new work performance culture that can help to achieve the mission and vision of the organization.

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## LIST OF PUBLICATIONS

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